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A Community-Based Assessment of Gynecological Morbidity in Mumbai, India

Rituparna Pati

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A COMMUNITY-BASED ASSESSMENT OF GYNECOLOGICAL MORBIDITY
IN MUMBIA, INDIA

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B.A., Yale University, 1997

M.D., University of Connecticut, 2004

A Thesis

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Requirements for the Degree of

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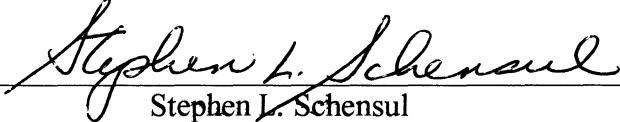
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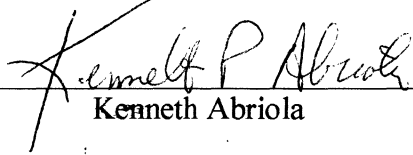
Master of Public Health Thesis

A COMMUNITY-BASED ASSESSMENT OF GYNECOLOGICAL MORBIDITY
IN MUMBIA, INDIA

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Table of Contents

Chapter 1 <i>Introduction</i>	Page 1
Chapter 2 <i>An Overview of Gynecological Morbidity</i>	Page 8
Chapter 3 <i>Gynecological Morbidity in India</i>	Page 39
Chapter 4 <i>Methodology</i>	Page 50
Chapter 5 <i>The Study Community</i>	Page 62
Chapter 6 <i>In Their Own Words: The Context of Gynecological Health</i>	Page 84
Chapter 7 <i>Gynecological Morbidity in the Study Community</i>	Page 100
Chapter 8 <i>Conclusions and Recommendations</i>	Page 137
Bibliography	Page 151

List of Tables

Table 3.1 Prevalence of Reproductive Tract Infections from Eight Community-Based Studies: Clinical, Laboratory and Self-Reported	Page 45
Table 3.2 Percentage of ever-married and currently married women reporting symptoms of gynecological morbidity in India in 1998-1999	Page 47
Table 7.1 Prevalence, Severity and Treatment of Self-Reported Symptoms in Past Three Months	Page 100
Table 7.2 Factor Analysis of 32 Symptoms	Page 104
Table 7.3 Laboratory Diagnoses of Gynecological Morbidity	Page 121

List of Figures

Figure 1
Gynecological Morbidity

Page 13

Chapter 1

Introduction

The focus of this thesis is the gynecological morbidity of women in a poor, urban community on the outskirts of Mumbai, India. This thesis is part of a larger study examining the reproductive and sexual health of women in Mumbai. The principal aims of this thesis are:

- Assess the prevalence of gynecological morbidity in the community
- Understand women's perceptions of these problems and relate them to their biological significance
- Appreciate the challenges that women face in their daily lives and in their search for effective, affordable health care
- Understand the complexity of issues involved in delivering gynecological health care to women in India on the community level.

Ultimately, this thesis aims to contribute to the growing academic discourse on the largely neglected international health problem of gynecological morbidity.

Gynecological morbidity is a global health problem that is preventable but continues to afflict millions of women around the world. Defined as structural or functional disorders of the reproductive tract unrelated to pregnancy, gynecological morbidity has only recently been acknowledged as a serious public health concern by international policymakers. While it significantly compromises the physical and emotional health of women, gynecological morbidity has drawn more worldwide attention since its association with a higher risk of HIV infection.

Despite international recognition, gynecological morbidity remains largely neglected and poorly understood at the community level. Public health programs around the world have created an illusion of promoting women's health while devoting resources towards other interests. Health care initiatives have failed to address women's health concerns and issues as interests worthy of investment in their own right. Consequently, the status of women and their access to appropriate services have not improved in many parts of the world (Rishyasringa 2000).

In public health discourse, three constituencies—demography, maternal and child health, and women's health—have articulated women's health concerns in different ways. The community of population scientists “has tended to equate reproductive health with family planning.” Concerned primarily with reducing birth rates, family planning programs have “[focused] on numbers rather than the quality and responsiveness of services to women's health needs.” As a result, family planning programs in developing nations have neglected women as a distinct group with specific health care needs. This has resulted in a failure to address the issue of gynecological health (Pauchari 1994).

Advocates of the maternal and child health (MCH) programs promote the health needs of women during pregnancy and childbirth, and their skills for child care, without attending to their broader reproductive health needs. “This program has targeted women, although its true beneficiaries are children and the objective has been to improve child survival” (Pauchari 1994). In fact, efforts to improve child survival have achieved wide scale recognition while the maternal health component of the program has lagged behind. Morbidity leading to poor pregnancy outcomes exists long before and after pregnancy.

Essentially, women's health outside the realm of pregnancy has been largely ignored (Pauchari 1994).

Finally, "a growing community of women activists, NGOs and researchers, is concerned with broader women's issues, and has drawn attention to the importance of women's empowerment and reproductive rights for improving reproductive health" (Pauchari 1994). Women's health advocates view current programs as failures for women's reproductive health and criticize the exclusion of women from research and policy development. The fact that women have not had the opportunity to articulate their own health care needs has contributed to the failure of public health programs (Pauchari 1994).

However, despite this criticism, women continue to struggle to be heard. Public health programs still fall short of meeting the health care needs of poor women. Critics "contend that the present package of services leaves out important segments of the population and should be redesigned as it does little to address the health needs of the adolescent, the unmarried, the infertile, those who suffer from reproductive tract infections (RTIs) as well as those with unwanted pregnancy" (Pauchari 1994).

The developing world, constrained by limited knowledge and resources, faces a more difficult challenge and a stronger need to address the issue of gynecological health. Prevalence of gynecological morbidity in the developing world is known to be high, but accurate numbers remain elusive. Statistics are mostly extrapolated from community-based data derived from inconsistent clinical criteria and unreliable diagnostic techniques. Without solid documentation of gynecological morbidity, researchers have had little opportunity to explore socioeconomic and cultural factors. Thus, "underlying

determinants of gynecological morbidity, such as poverty, gender inequalities, women's autonomy and cultural norms, are poorly understood" (Oomman 2000).

While picture of gynecological morbidity in the developing world remains incomplete, funding and advocacy are also limited. "Particularly in resource-poor settings, limited awareness of the magnitude and significance of infectious morbidity means that funds are not allocated for accurate diagnosis. Cases are, therefore, not detected or reported. Lack of awareness of the problem is perpetuated, and the sequelae of RTIs continue to drain overstretched health resources" (Wassherheit 1989).

The impact of gynecological morbidity on women's reproductive health is "particularly serious in developing countries like India where weak or non-existent systems of health care make the diagnosis and treatment of these conditions difficult" (Pauchari 1994). Even with limited data, India reports a heavy burden of RTIs and other gynecological morbidity. However, India's primary health care program has few provisions for addressing RTIs. Special clinics for sexually transmitted infections (STIs) and other RTIs are only found in large cities and cater primarily to men and commercial sex workers. The social stigma of STIs deters women from seeking treatment and, consequently, they are less than one third of the STI patient population (Pauchari 1994).

Indian society provides a unique context for studying women's health and gynecological morbidity. "Unequal gender relations combine with the poor state of health services to keep the rate of STIs high" (Ramasubban 2000). Social institutions of universal and early marriage exacerbate the role that gender inequality plays in subordinating the health care interests of women. An authoritarian patriarchal family structure restricts women's mobility, making them dependent on male relatives for links

to the outside world, including access to health care. The cultural construction “of a sense of shame, fear and silence among women about their bodies” limits public education about their sexuality and sexual health (Ramasubban 2000)

Health indicators document Indian women’s disadvantaged position in society. “The adverse sex ratio, lower life expectancy among women and higher infant mortality among girl children are evidence of bias against women” (Rishyasringa 2000). India has not seen the global level of improvement in female mortality rates since World War II. Maternal mortality stands at 600 deaths per 100,000 live births, “at least 50 times higher than in the developed world. Moreover, the actual risk of an Indian woman dying from causes related to pregnancy and childbirth is over 20 times greater. Higher maternal mortality is a reflection of poor nutrition, early marriage and inadequate quality of health care” (Rishyasringa 2000).

While a cultural preference for sons and consequent bias against daughters may explain low survival among females in the early years of life, gender bias continues to affect women’s health throughout their lives. Women’s “triple burden – reproduction, domestic work and productive labor” contributes to morbidity and causes premature death. “Despite the higher incidence of morbidity, women receive less health care than males. Only a small proportion of female illnesses are treated. The quality of treatment is inferior, is often received late and is mostly ineffective.” Ultimately, the result is a skewed sex ratio of 935 women per 1000 men (Rishyasringa 2000).

“Health policy in India has floundered in its management of both the demand and supply sides” (Rishyasringa 2000). As late as 1992-93, half of all pregnant women in India did not receive a single antenatal check-up. “Initiatives over the last half-century

have not effected a significant change in the situation of women. Poverty alleviation programs are structurally biased against women, and welfare programs for women and children are limited in scope and resources” (Rishyasringa 2000).

Historically in India, women have never been recognized as a group entitled to attention and resources in their own right. As in many developing countries, women’s interests have always been attached to alternative agendas, such as family planning or child survival. In the post-Independence era when India focused on controlling its population growth as a means of promoting economic advancement and modernization, the Family Planning Program emerged as the dominant social framework. “Women’s welfare did not occupy a separate plank in planning initiatives but was discussed only as part of the community development program” (Rishyasringa 2000). This served as an insult to women as a whole, “since women are not just another group from among the poor but face a very different set of disadvantages” (Rishyasringa 2000).

Addressing women’s needs as a distinctive group among the disadvantaged populations of India continues to be a challenge. Indian studies on women’s reproductive health problems are scanty, and there large gaps in knowledge about women’s perceptions of morbidity and health seeking behavior. Determinants of gynecological morbidity, including onset of sexual activity, sexual practices and contraceptive use, are relatively unexplored. Finally, the consequences of gynecological morbidity are minimally recognized in India (Oomman 2000).

Research is required to understand levels, determinants, and consequences of women’s reproductive health problems in India. Specifically, collaboration between medical and social researchers could answer questions about the range of services

available and the dynamics of treatment seeking behavior. Pauchari identifies a research agenda for the future:

“Interdisciplinary research, combining biomedical and social science methods should be promoted so that epidemiological information on levels, trends, and determinants of morbidity can be obtained along with information that provides a clearer understanding of the context in which health problems arise, how women define their health problems, how they manage their own and their family’s health, and how they choose their health care options” (Pauchari 1994).

In response to this and other calls for action, the International Institute of Population Sciences in Mumbai, India in collaboration with the Institute for Community Research and Center for International Community Health Studies of the UCONN School of Medicine in Hartford, CT, launched a multidisciplinary research project in 2001. The project, entitled RISHTA (Research and Intervention in Sexual Health: Theory to Action) which means “relationships” in Hindi, examines the reproductive and sexual health of men and women in three communities of Mumbai, India. Through a community-based assessment of gynecological morbidity, the RISHTA project explores how the overall context of poverty, gender stratification and cultural norms affect women’s vulnerability to disease. Furthermore, it traces women’s patterns of seeking treatment for their problems and examines their decision-making process. The results of the study will contribute to the development of valuable interventions in women’s gynecological health.

Chapter 2

An Overview of Gynecological Morbidity

A. Women and Their Susceptibility to Disease

Reproductive health is a gender-neutral term that the World Health Organization defines as a “state of complete physical, mental and social well being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes” (United Nations 1994). For women, reproductive health includes obstetric and gynecological health, with the objectives of providing safe pregnancies, protecting motherhood and preventing reproductive tract infections (Bhatia 1997). Reproductive morbidity refers to “conditions of ill health related to reproductive processes during and outside the childbearing episode” (Younis 1993). Within the realm of reproductive morbidity, gynecological morbidity is defined as structural and functional disorders of the reproductive tract unrelated to pregnancy, such as menstrual disorders, cervical cell changes, genital prolapse and reproductive tract infections (Bhatia 1997).

Gynecological morbidity, by definition, applies only to women. However, as a subset of gynecological morbidity, sexually transmitted infections (STIs) are diseases that are found in both men and women. A growing body of evidence shows that STIs disproportionately affect more women than men around the world (Ramasubban 2000). STIs are transmitted at a much higher rate from men to women than the reverse. Women are twice as likely as men to develop gonorrhea from contact with an infected sex partner (Sherris et al 1994). The infected semen that stays within the vagina allows time for the organism to penetrate the mucosa. For some STIs, such as HIV, the concentration of the

infectious organism is higher in semen than in vaginal secretions, making male to female transmission more efficient.

Women are biologically more susceptible to STIs than men because of the structure of their reproductive organs and the presentation of disease. The vagina has a larger mucosal surface vulnerable to exposure to the sexual partner's secretions. Furthermore, the internal environment of the vagina is more favorable for the growth of disease-causing organisms than the penis.

Adolescent women are especially vulnerable to contracting disease because of the immaturity of their cervical and vaginal tissues. With fewer layers of mucous membrane and less secretions, the genital tract and cervix of an adolescent woman have not fully developed defensive mechanisms and barriers for ascending pathogens. This is particularly true for gonorrhea, chlamydia and HIV-carrying organisms.

The fact that most STIs are either asymptomatic or mildly symptomatic in women presents a greater challenge to diagnose, treat and cure women of disease. The clinical manifestations of STIs are, in general, more obvious in men than in women. Thus, women suffer a delay in seeking care due to absence or confusion of symptoms. As a consequence, severe sequelae of disease also disproportionately affect women, since untreated STIs are more likely to cause chronic, systemic distress that may threaten their reproductive functions and even their lives. "STIs, therefore, take a greater toll on women, albeit invisibly, as compared to men, in terms of higher incidence and prevalence" (Ramasubban 2000).

The social status of women, often inferior to that of men, contributes to their vulnerability to disease. A critique of the health care system and status of women in

developing nations asserts that “both men and women suffer from the effects of socioeconomic inequality ... Women, in addition, have to bear the consequences of their inferior position in society as women” (Coyagi 1991). Women have lower levels of education and economic status than men around the world, and particularly in the developing world. Their subordinate economic and social status makes it difficult for them to be equal partners in marital or sexual relationships (Wasserheit 1989).

Consequently, “gender-based inequalities influence women’s vulnerability to infections and compromise their ability to prevent or treat infections” (Oomman 2000). In situations where women cannot achieve financial or social independence, they are often married at an early age and consequently exposed to STIs for a longer duration if their husbands engage in polygamy or sexual promiscuity. Within marriage, women are in unequal sexual relationships that make it difficult for them to protect themselves from STIs. They are not expected to initiate discussions about sex and they are not in a position to refuse sex or demand safe sex. Women who do not have property rights are not able to leave men who may coerce them for sex. Destitution forces many single or abandoned women to either occasionally provide sex in exchange for money or engage in commercial sex work (Ramasubban 2000).

Masculine codes of behavior further pronounce women’s vulnerability to sexual disease. Cultural perceptions about male sexuality often encourage premarital and extramarital sex. Notions about what constitutes sexual pleasure for men are often propagated at the expense of condom use and protection from disease. For example, the perception that condoms reduce male sexual pleasure is still widespread. In some parts of the developing world, intravaginal preparations used to increase the man’s pleasure

during intercourse actually increase the risk of reproductive tract infections in the woman. “Women’s economic dependence on men and their cultural subordination to these perceptions of masculinity and femininity make them silent and helpless victims, and powerless to change men’s behavior or the circumstances of their own lives” (Wasserheit 1989; Ramasubban 2000).

Lack of awareness and lack of access to health care cause women in the developing world to delay seeking care for symptoms of disease. Women who have not had sexual health education may not recognize the onset of STI or other symptoms. They are more likely to confuse abnormal vaginal discharge with normal secretions, a mistake made by plenty of clinicians. Cultural stigma associated with a genital examination and STIs inhibit women from seeking care. As a result, there are 9 men visiting STD clinics for every woman (Sherris et al 1994).

Even if they surmount these barriers, women in search of treatment often do not have adequate services available to them. Most medical facilities are not equipped to provide accurate diagnoses or appropriate therapies for gynecological morbidity. “Unfortunately, screening and treatment for infection has rarely been incorporated into services offered at family planning, antenatal, or maternal-child health clinics. In most of the developing world, if care for RTIs is available at all, it is only through dermatovenereologists or sexually transmitted disease clinics, settings that are usually socially unacceptable for women” (Wassherheit 1989). The lack of exploration and knowledge about women’s treatment seeking behavior has further impeded the development of women-centered services for gynecological morbidity (Oomman 2000).

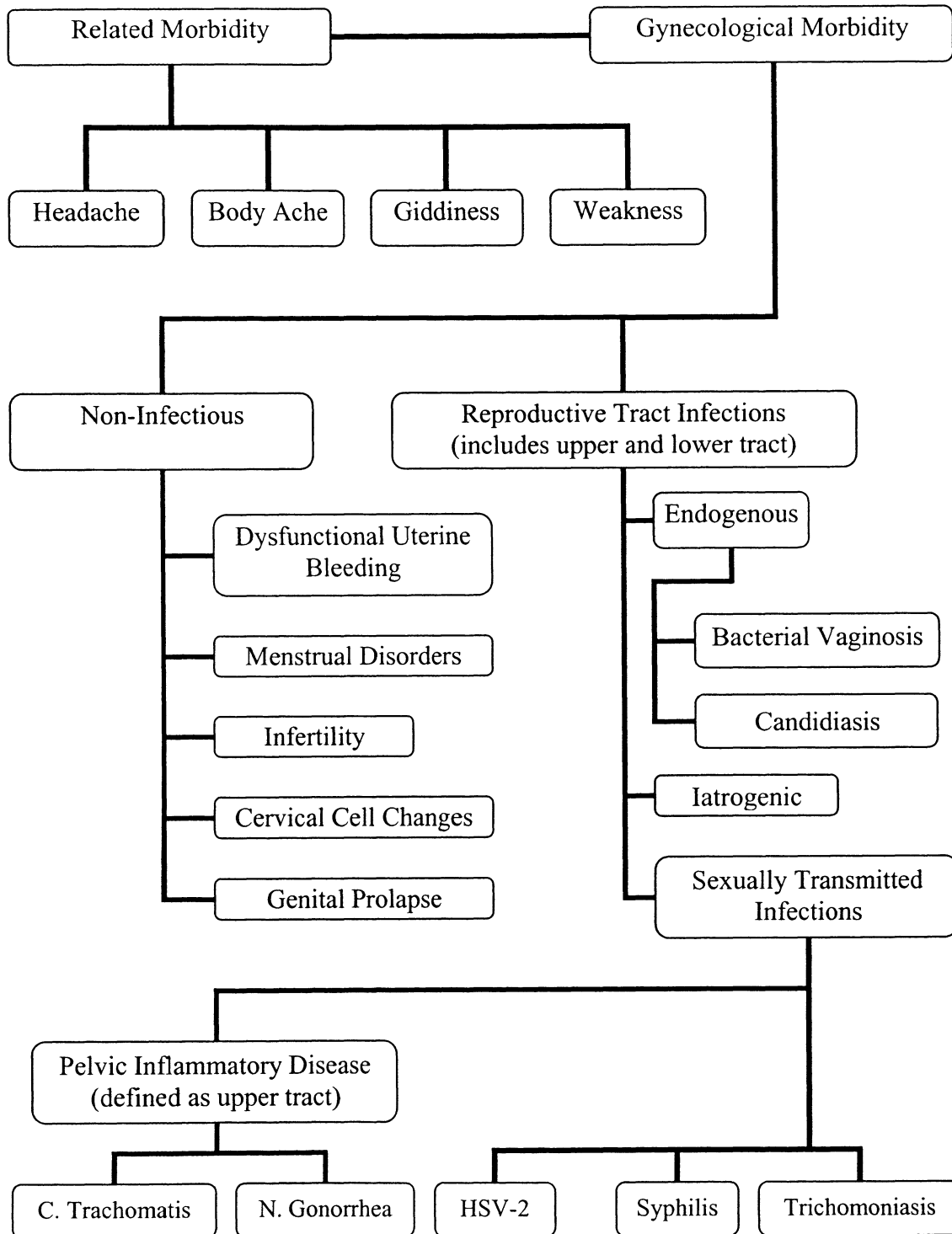
“The net result is that a woman in the developing world is probably far less likely than her Western counterpart to receive care at an early, benign stage of infection, before lower tract infection ascends to cause upper tract disease... In addition, the social and psychological impact of complications such as infertility may be far more devastating in developing countries than in Western societies... [because] a woman who fails to produce children faces divorce and social ostracism” (Wasserheit 1989).

B. Definitions of Gynecological Disease

Gynecological morbidity encompasses a wide spectrum of disease entities. As shown in Figure 1, gynecological diseases are either infectious or non-infectious in origin. Bleeding disorders, menstrual abnormalities, infertility and genital prolapse are all examples of non-infectious gynecological morbidity. Infectious gynecological morbidity consists of reproductive tract infections (RTIs) with three main categories: endogenous, iatrogenic and sexually transmitted infections (STIs). Each branch of RTIs has subcategories of disease that affect either or both the upper or lower reproductive tract.

Women with gynecological morbidity report a range of symptoms, some of which fall in the realm of gynecological disease and others that are associated with the disease. The associated symptoms, referred to as “Related morbidity,” are general body complaints, such as headache, body ache and weakness, that women report with their gynecological symptoms. However, these symptoms are ambiguous in origin and may be related to other health conditions such as poor nutrition, physical exhaustion or emotional distress.

Figure 1 Gynecological Morbidity



In order to appreciate the significance of gynecological morbidity in the lives of women, one must first understand the terms used to define disease. In their classic text, *Handbook of Gynecological & Obstetrics* (1993), Jeanette S. Brown and William R. Crombleholme review the main features of gynecological diseases. Their textbook definitions are provided below and are consistent with the standards of other textbooks and reference materials used by practicing physicians.

1. Noninfectious Gynecological Morbidity

Dysfunctional uterine bleeding

Dysfunctional uterine bleeding is abnormal bleeding without an identifiable pathologic cause. The most common reason for dysfunctional uterine bleeding is anovulation, resulting in a hormonal imbalance that causes irregular shedding of the lining of the uterus (the endometrium). A patient with anovulation often presents with irregular, prolonged bleeding.

Descriptive terminology for abnormal bleeding includes the following:

Menorrhagia: prolonged, heavy bleeding at regular intervals

Metrorrhagia: bleeding at irregular intervals

Menometrorrhagia: prolonged, heavy bleeding at irregular intervals

Polymenorrhea: frequent regular bleeding at intervals of less than 22 days

Dysfunctional uterine bleeding is a diagnosis of exclusion, determined only after all other pathologic causes have been ruled out. The differential diagnosis for abnormal bleeding is large. Endocrine or coagulation disorders, gastrointestinal carcinomas, and hormonal medications could be sources of uterine bleeding. Genital sources include carcinomas, polyps, uterine fibroids, threatened abortions, and ectopic pregnancy.

Abnormal bleeding could also be a consequence of medical procedures or a side effect of contraceptive devices, such as the intrauterine device (IUD).

Menstrual disorders

Dysmenorrhea, or painful menstruation, is a gynecological cause of pelvic pain that is distinctly different from other sources of lower abdominal pain. An estimated 50 percent of menstruating women suffer from dysmenorrhea, a lower abdominal pain that increases and decreases in unpredictable intervals. The pain may radiate to the lower back, labia or inner thighs and may be accompanied by headache, fatigue and nausea. Primary dysmenorrhea is menstrual pain that can not be attributed to any organic cause. Symptoms begin 6 months to 2 years after menarche and recur at the beginning of menstrual cycles. Secondary dysmenorrhea is menstrual pain that has an organic cause, most often due to endometriosis, or the abnormal growth of endometrial tissue on structures outside of the uterus such as the ovaries, bowel and bladder. Other causes of secondary dysmenorrhea are uterine fibroids (leiomyomas), proliferation of endometrial glands (adenomyosis), ovarian cysts, and the presence of an IUD.

Amenorrhea

Primary amenorrhea is the absence of menses by age 16 in a female who has normal growth and secondary sexual characteristics. It may also be the absence of menses by age 14 in a female who does not have normal growth and secondary sexual characteristics. Secondary amenorrhea is the absence of menses for 3 menstrual cycles or for 6 contiguous months in a woman who has previously been menstruating. The most common cause of amenorrhea in women of reproductive age is pregnancy. Most other

cases can be attributed to abnormal or irregular hormone levels as a result of medications or endocrine disorders.

Variations of menorrhagia and metrorrhagia may also be considered menstrual disorders and are described above.

Infertility

Infertility is defined as the inability of a couple to conceive a pregnancy after one year of attempts through sexual intercourse. Approximately 15 percent of couples in the United States are diagnosed with infertility. The most common reasons for infertility are attributable to male factors (40 percent of the time) and female tubal factors (25 percent). Other reasons for infertility are ovulatory dysfunctions and uterine or cervical factors.

Cervical cell changes

Cervical cell changes are normal responses to hormonal changes within a woman. The underlying tissue of the cervix has a high rate of turnover that results in a red appearance around the cervical os, or opening of the cervix that leads to the uterine cavity. Formerly known as cervical erosion, the redness about the os is now referred to as cervical ectopy. Commonly seen in women with fluctuating hormone levels, such as adolescents, pregnant women and women taking oral contraceptives, cervical ectopic tissue may be more susceptible to infection but is not itself an indicator of disease (Population Council 2004).

Genital prolapse

Defects of the muscle and ligaments that support structures within the pelvis result in genital prolapse. There are various terms to describe the different conditions that may result from the protrusion of specific structures into the vaginal vault. For

example, a cystocele versus a rectocele is a protrusion of the bladder or rectum, respectively, into the vaginal vault. Uterine prolapse commonly occurs with the two aforementioned conditions and is defined as a descent of the cervix and body of the uterus into the vaginal canal. Vaginal vault prolapse usually occurs in the absence of a uterus (ie post-hysterectomy) and is characterized by a descent of the vagina toward or through the vaginal opening, or introitus.

The severity of prolapse indicates the position of the displaced organ. A first degree prolapse is a protrusion at the level of the lower vagina. Second degree prolapse is when the structure is at the vaginal opening. Third degree prolapse indicates that the structure is protruding outside of the vagina.

Among reproductive aged women, genital prolapse is most often a consequence of labor and childbirth which tears and stretches the muscular and fibrous supports of the pelvic floor. However, even women who have never been pregnant may suffer from genital prolapse due to a genetic disposition or increased abdominal pressure. Obesity, chronic coughing, straining during defecation, and physical labor involving weight-bearing exercise that increase the risk of genital prolapse.

2. Reproductive Tract Infections

Reproductive tract infections (RTIs) encompass three types of genital tract infections: endogenous infections, iatrogenic infections and sexually transmitted infections. Endogenous infections are defined by the Population Council as “an overgrowth of organisms normally present in the vagina” (2004). Endogenous infections are the most common RTIs around the world and are considered easy to treat and cure.

Bacterial vaginosis and candidiasis are two of the most prevalent endogenous infections worldwide and are described in more detail below.

Iatrogenic infections are caused by organisms introduced into the reproductive tract during a medical procedure, such as induced abortion or IUD insertion. Contaminated medical instruments may be the source of the infections, or the medical procedure may exacerbate and spread an infection that was already present in the reproductive tract. A wide range of bacteria and other micro-organisms are responsible for iatrogenic infections, which can affect almost any part of the woman's reproductive system as well as other organ systems.

Sexually transmitted infections (STIs) are caused by viruses, bacteria or parasites that are transmitted through sexual activity with an infected partner. Among the 30 or more STIs that have been identified, some are easily treatable while others – such as HIV – are not. Both men and women carry and transmit STIs, and newborn children may be infected with certain STIs that are transmitted from the mother during pregnancy or delivery. Herpes simplex virus, trichomoniasis and chlamydia are leading causes of STIs worldwide (Population Council 2004).

While most RTIs can affect both the external genitalia and the internal reproductive organs of women, specific disease-causing organisms have preferred sites for infection. Lower reproductive tract infections involve the following female structures: the vulva, vagina and cervix. Endogenous infections, such as bacterial vaginosis and candida, most often stay confined to the vagina. These endogenous organisms therefore cause *vaginitis*, a lower RTI marked by inflammation of the vagina and/or vulva. STIs, such as trichomoniasis, can also cause vaginitis. Other STIs,

particularly gonorrhea and chlamydia, are usually found in the cervix, just above the vagina. Infection and inflammation of the cervix is also a lower RTI and is called *cervicitis*.

Upper reproductive tract infections involve the uterus, fallopian tubes and ovaries. Upper RTIs are often a direct complication of lower RTIs. Organisms that cause cervicitis are more likely than organisms that cause vaginitis to migrate upwards and result in upper RTIs. For example, gonorrhea and chlamydia are two of the most common causes of an upper RTI because they infect the cervix. Pelvic Inflammatory Disease (PID) is the term for an upper RTI that is specifically caused by gonorrhea or chlamydia. Iatrogenic infections can also result in upper RTIs since any transcervical procedure has the potential of introducing organisms into the female pelvis.

Aside from causing nuisances such as itchiness, pain and vaginal discharge, lower RTIs have more serious sequelae if left untreated and allowed to spread into upper RTIs. Chronic abdominal pain and menstrual irregularities are often symptoms of upper RTIs. Upper RTIs scar the fallopian tubes, rendering them dysfunctional, resulting in infertility and ectopic pregnancies; the latter may be fatal. (Population Council 2004).

A symptom common to both lower and upper RTIs, vaginal discharge presents a challenge for clinicians to distinguish not only among sources of infection, but also between normal and abnormal. Normal vaginal discharge is approximately 1 to 4 mL of fluid per 24 hours that is white or transparent, thick and odorless. The amount of discharge may increase during pregnancy, oral contraceptive use and mid-menstrual cycle. The pH of vaginal discharge is “the single most important finding that drives the diagnostic process” and is normally between 4.0 and 4.5. Under the microscope, vaginal

discharge contains many squamous epithelial cells with rare polymorphonuclear leukocytes (PMNs; Up to Date 2003).

Abnormal vaginal discharge may be purulent, thick and adherent, “cottage cheese-like” or foul smelling, depending on the source of infection. However, the appearance is extremely nonspecific and should never be used alone for diagnosis. A pH above 4.5 is indicative of a disease process while microscopy and laboratory tests confirm the specific disorder. Diseases within each subtype of RTIs will now be defined in greater detail to provide a comprehensive and clear picture of what constitutes gynecological morbidity of infectious origin (Up to Date 2003).

1. Endogenous Infections

Bacterial Vaginosis

Bacterial vaginosis is the most common cause of vaginitis in women of childbearing age with a worldwide prevalence between 5 and 60 percent. It arises from an imbalance in the vaginal flora, characterized by a loss of lactobacilli and a consequent increase in the vaginal pH. This creates an environment for the growth of numerous disease-causing organisms, such as *Gardnerella vaginalis*, *Mycoplasma hominis* and *Bacteroides*. Although the mechanism by which the floral imbalance occurs is unknown, risk factors include early onset of sexual activity, multiple sexual partners, cigarette smoking, douching, and use of intrauterine contraceptive device. While sexual activity is a risk factor for infection, bacterial vaginosis is not sexually transmitted and women who have never had vaginal intercourse may also be infected.

Symptoms of bacterial vaginosis include a “fishy smelling” discharge that is thin, homogeneous, and gray, white or yellow-green in color. Itchiness, dysuria and

dyspareunia are rare. Approximately 50 percent of women are asymptomatic, therefore diagnosis of bacterial vaginosis is based on physical exam and laboratory results. Three of the four criteria (listed below) are recognized worldwide as being necessary for diagnosis, although these same findings may also be present in patients with diseases other than bacterial vaginosis.

Amstel diagnostic criteria for bacterial vaginosis	
<p>A positive diagnosis is made if 3 of the following 4 criteria are present:</p> <ul style="list-style-type: none"> • Speculum examination reveals homogeneous discharge • Vaginal pH > 4.5 • Positive whiff-amine test, defined as the presence of a fishy odor when 10 percent KOH is added to vaginal discharge samples • Microscopy shows > 20 percent clue cells, defined as vaginal epithelial cells studded with coccobacilli 	

Up to Date 2003; Population Council 2004

While bacterial vaginosis may resolve spontaneously, treatment is recommended for women who experience symptoms and for asymptomatic women prior to medical procedures such as abortions or hysterectomies. The preferred treatment is metronidazole, an antifungal medication administered orally or vaginally, with a cure rate of 70 to 80 percent. Clindamycin is an alternative medication but its intravaginal regimen is less effective than metronidazole (Up to Date 2003).

Despite the efficacy of medical therapy, approximately 30 percent of patients who initially experience relief of symptoms have a recurrence within three months. The most likely reasons include re-infection or failure to eliminate the disease-causing organism and restore the normal vaginal flora. Prolonging therapy from one week to 10 to 14 days has proven to be somewhat effective in managing symptomatic relapses (Up to Date 2003).

Candidiasis

Candida vulvovaginitis is more commonly known as candidiasis, yeast infection or thrush. Candidiasis causes approximately one-third of vaginitis cases and most often involves the fungus *Candida albicans*. *Candida* is considered part of the normal vaginal flora, but certain factors can create an environment leading to an overgrowth of the organism and resulting in infection. Risk factors for infection include uncontrolled diabetes mellitus, immune suppression, pregnancy, and use of antibiotics, oral contraceptives and intrauterine devices. Candidiasis is not considered a sexually transmitted disease, but infection has been associated with sexual activity and certain sexual behaviors.

Candidiasis is characterized by vulvar pruritis, vaginal soreness and irritation, as well as dysuria and dyspareunia. The vulva, vagina and cervical tissue may appear erythematous, or red and inflamed. The quality of vaginal discharge is variable with some women experiencing little or no discharge while other women report thick, adherent, curd-like discharge. Candidiasis is distinguished from other forms of vaginitis by the normal pH of the vaginal discharge (between 4.0 and 4.5). Diagnosis is confirmed by microscopy, although only 50 percent of patient samples show the characteristic budding yeast and hyphae.

Treatment is recommended for patients with symptoms, while the 10 to 20 percent of patients without symptoms do not require therapy. Antimycotic drugs administered orally or vaginally have cure rates above 80 percent. The most common medical regimen is oral fluconazole taken as a single dose; recurrent infections are treated with a second

dose three days later. An alternative regimen is a seven-day vaginal therapy with the antifungal medication, clotrimazole (Up to Date 2003).

If left untreated, endogenous infections have serious potential complications. The organisms that cause vaginitis may ascend into the upper reproductive tract and cause an upper RTI, which can lead to ectopic pregnancy, infertility and chronic pelvic pain. Bacterial vaginosis, in particular, creates a higher risk of preterm delivery in pregnant women. Evidence also suggests that bacterial vaginosis increases the risk of HIV transmission between sexual partners and perinatally (Population Council 2004, Up to Date 2003).

2. Iatrogenic Infections

Iatrogenic infections are the most preventable form of RTIs. Improperly sterilized medical equipment or undetected RTIs are the origins of the bacteria that cause iatrogenic infections. Therefore, a wide range of bacteria may be responsible for the infections, including those on surface environments as well as those that cause endogenous infections and sexually transmitted diseases.

Although almost any medical procedure has the potential of causing infection, unsafe abortions pose the highest risk of iatrogenic infections for women, particularly in the developing world where the majority of unsafe abortions are performed. There is a growing body of evidence that female sterilization (ie tubectomy) is a significant factor in the introduction of upper RTIs. Even stronger evidence points to IUDs which have been shown to increase the risk of upper RTIs by 3 to 5 times, either by altering the natural cervicovaginal environment or by facilitating the ascent of pathogenic organisms into the uterine cavity. A 1989 population-based study in rural Bangladesh found that “users of

intrauterine devices and tubectomy were each approximately 4 times as likely to report symptoms and 7 times as likely to have examination-confirmed infection as nonusers” (Wasserheit 1989).

Symptoms of iatrogenic infections are similar to those of any upper RTI. Warning signs of infection after a transcervical procedure include pelvic pain, sudden high fever, chills, menstrual disturbances, abnormal vaginal discharge and dyspareunia. Despite these symptoms, iatrogenic infections are often not addressed until they have already caused irreparable damage, such as scarring or blockage of the fallopian tubes.

While effective antibiotic treatment is available, the delay in diagnosis points to the significant role that prevention can play in minimizing the frequency and consequences of iatrogenic infections. Improving women’s access to medical services and training health care providers in proper sterilization and infection control procedures are essential steps towards prevention. Health care practitioners should check for RTIs before carrying out procedures such as IUD insertions, to avoid introducing infections into the uterus. Furthermore, women should avoid using IUDs if they are at risk of RTIs or STIs, and they should seek timely treatment for RTIs in safe and clean environments. Finally, both health care providers and patients should be aware of the warning signs of infection so that if prevention fails, prompt treatment has a chance of succeeding (Population Council 2004).

3. STIs

A significant cause of morbidity around the world, STIs represent a complex category of diseases that may or may not have symptoms and cures. Most notably, HIV is an STI with a potentially long asymptomatic period and has no cure. The transmission

and acquisition of HIV are facilitated by the presence of other STIs, a few of which are defined below.

Trichomoniasis

Trichomoniasis is the third most common cause of vaginitis after bacterial vaginosis and candidiasis; it affects approximately 180 million women around the world. The sexually transmitted organism is the flagellated protozoan *trichomonas vaginalis* found in the vagina, urethra and paraurethral glands. For women with the infection, only 30 to 40 percent of their male sexual partners carry the organism, implying that men may transmit the disease while women harbor it (Up to Date 2003).

The most common presenting symptoms are a thin, purulent, foul smelling discharge and vaginitis marked by pruritis, dysuria and dyspareunia. Only 10 to 30 percent of infected women present with the classic green-yellow frothy vaginal discharge, and only 2 percent present with a “strawberry cervix” – punctate hemorrhages on the surface of the cervix and vagina. Infected women may be asymptomatic, and infected men are more likely to be asymptomatic than symptomatic.

Diagnosis is definitive only by visualization of motile trichomonads on “wet mount” microscopy, meaning a vaginal discharge specimen with a drop of sterile saline and cover slip on a microscope slide. However, only 50 to 70 percent of cases have vaginal discharge samples that reveal the protozoa. Cultures of vaginal specimens may confirm suspected cases of infection in women who present with nondiagnostic signs such as an elevated vaginal pH and PMNs on microscopy.

As with all STIs, treatment is recommended not only for all infected women but also for their sexual partners. Oral metronidazole is the preferred medical therapy, either

as a single 2 gram dose or a 500 milligram dose twice a day for seven days. Sexual abstinence until both partners have completed treatment raises cure rates from 85 to above 90 percent. Failure to treat can result in a higher risk of HIV transmission and acquisition and premature delivery for pregnant women (Up to Date 2003).

Chlamydia

Chlamydia trachomatis, along with Neisseria gonorrhea, are the most common causes of cervicitis, or inflammation and infection of the cervix. Chlamydia is an intracellular bacteria that usually infects the endocervix but may also colonize the urethra. The majority of infected women (70 percent) are asymptomatic while those with symptoms often present a picture that is indistinguishable from vaginitis. Pruritis, purulent discharge, dysuria, polyuria and intermenstrual or postmenstrual bleeding are some symptoms of cervicitis. Chlamydia may also cause lymphogranuloma venereum, a condition characterized by genital lesions and swollen lymph nodes and glands. Lower abdominal pain would suggest the spread of infection to the upper reproductive tract, which occurs in 20 to 40 percent of cases (Up to Date 2003; CDC STD Surveillance 2003).

On physical exam, cervical erythema, edema and especially mucopurulent discharge are the classic signs of cervicitis. Mucopurulent discharge is defined as the presence of 10 to 30 PMNs in a high-power microscopic field. Cervical friability, or bleeding of the cervical tissue during specimen collection, is also strongly suggestive of cervicitis. Definitive diagnosis, however, requires a culture of cervical specimen or blood tests for the presence of serum antigens (Up to Date 2003; Brown 1993).

If properly treated, chlamydia can be cured. The recommended medications for the infected patient and her sexual partner are oral antibiotics, doxycycline or tetracycline; an alternative regimen is oral erythromycin. Aside from causing pelvic inflammatory disease, chlamydia may result in a peri-hepatitis syndrome. Maternal chlamydia has been implicated in numerous complications during pregnancy, including neonatal conjunctivitis and pneumonia (Brown 1993; Population Council 2004).

Neisseria gonorrhea

Neisseria gonorrhea is a gram negative diplococcal bacteria that causes a wider variety of symptoms than chlamydia. It coexists with chlamydia in up to 50 percent of cases in the United States. *N. gonorrhea* may present as cervicitis, as described above, or with more systemic symptoms involving the skin, joints, liver, heart and central nervous system in what is termed “disseminated gonococcal infection” in 1 to 3 percent of patients. Like chlamydia, however, the majority of infected women (50 percent) are asymptomatic (Brown 1993; Up to Date 2003; CDC STD Surveillance 2003).

Gonorrhea is diagnosed definitively by culture of the cervix or of any other site of infection. Treatment of gonorrhea is an intramuscular injection of the antibiotic, ceftriaxone. Since coinfection with chlamydia is so common, treatment of both pathogens is recommended through a regimen of intramuscular ceftriaxone and a course of oral doxycycline. Treatment failure is extremely rare, making test of cure unnecessary. However, untreated gonorrhea poses serious complications such as pelvic inflammatory disease, chronic intraamniotic infection in pregnant women, preterm delivery and blinding neonatal conjunctivitis (Brown 1993).

Pelvic Inflammatory Disease

As mentioned earlier, Pelvic Inflammatory Disease (PID) is an upper RTI that is specifically caused by gonorrhea or chlamydia. These microorganisms ascend from the vagina and cervix into the endometrium of the uterus and spread to the fallopian tubes and other contiguous structures. Once other causes of abdominal pain have been ruled out (i.e. ectopic pregnancy, appendicitis), a patient who presents with lower abdominal pain, cervical motion tenderness and adnexal tenderness on pelvic exam meets the clinical criteria for PID. In addition to meeting all of the clinical criteria, the patient must have one of the following conditions in order to be diagnosed with PID: chlamydia or gonorrhea infection, temperature > 100.4 degrees Fahrenheit, white blood cell count $> 10,000$ cells per mm^3 , purulent material in the peritoneal cavity, pelvic abscess or inflammatory complex, sexual activity with a person known to have gonorrhea, chlamydia or nongonococcal urethritis (CDC STD Surveillance 2003).

Treatment options for PID include the medical regimen used for gonorrhea and its alternatives. Otherwise, depending on the clinical condition of the patient and any complicating factors, hospitalization of the patient may be required and intravenous antibiotics would be the recommended therapy. As already mentioned, PID can result in significant morbidity, especially chronic pelvic pain, infertility, and potentially fatal ectopic pregnancies as a result of fallopian tube damage and adhesions (Brown 1993).

Syphilis

Syphilis is known as “the great masquerader” for its complex and highly variable clinical course. It is caused by the bacterium, *Treponema pallidum*. There are three clinical stages of infection, with latent asymptomatic phases in between. Primary syphilis

is defined as one or more painless ulcer at the site of infection, usually the genitals, rectum or mouth. Secondary syphilis usually appears about 4 to 8 weeks later in the form of mucocutaneous lesions, or a skin rash, associated with fever, malaise and generalized lymphadenopathy. This is followed by latent syphilis which can continue for years during which the organism persists inside the patient's body without symptoms. Tertiary syphilis has numerous systemic manifestations including inflammatory lesions of the cardiovascular system, skin and bones. If there is clinical or laboratory evidence of central nervous system infection, this form of late syphilis is known as neurosyphilis. Tertiary syphilis usually appears 15 to 30 years after untreated infection and affects about one-third of untreated cases (CDC STD Surveillance 2003; Population Council 2004).

Syphilis, in any clinical stage of infection, is diagnosed by the demonstration of *T. Pallidum* in clinical specimens by dark field microscopy or direct fluorescent antibody (DFA-TP). A strong case for diagnosis could also be made for a patient with clinical symptoms and signs who has at least one reactive serologic test. An assay for a serum antibody to *T. pallidum* (MHA-TP), or the nontreponemal titers of the Venereal Disease Research Laboratory (VDRL) and rapid plasma reagin (RPR) are all acceptable tools to help support a probable diagnosis. Neurosyphilis should be confirmed with a reactive serologic test for syphilis and a reactive VDRL in the cerebrospinal fluid (CDC STD Surveillance 2003).

Benzathine penicillin administered intramuscularly is the treatment of choice for all stages of syphilis. Follow-up is important for patients and their partners because of the chronic course and long asymptomatic periods of the disease. Complications of syphilis can involve almost any organ system and result in a range of problems from paralysis to

cardiovascular disease to death. Maternal infection may cause stillbirth or congenital syphilis with multi-system defects (CDC STD Surveillance 2003; Brown 1993).

HSV-2

Herpes Simplex Virus (HSV) has two strains: HSV-1 associated with orogenital contact, and HSV-2 associated with genital contact. As indicated in its name, HSV is a virus that inoculates a mucous membrane, resulting in either a carrier or symptomatic state of infection. Primary HSV is considered the first episode of symptoms, usually characterized by painful vesicular lesions in the genital or anal area. If the cervix or urethra is infected, the symptoms may be more consistent with cervicitis or urethritis, respectively. Associated symptoms include fever, myalgia and malaise, making primary HSV more severe and prolonged than recurrent episodes. Diagnosis of HSV involves a clinical evaluation and either the isolation of the virus from lesion specimens or demonstration of its presence through serum antigen or antibody tests.

Since there is no effective cure for HSV, it is characterized by sporadic recurrences of symptoms. The recurrences tend to be milder and shorter than the primary episode but are still marked by painful blisters that cause dysuria and dyspareunia. Oral acyclovir, an antiviral medication, may partially relieve symptoms or shorten their duration. Patients should refrain from sexual activity while lesions are present and pregnant women should deliver by cesarean section if infection is active. The most serious complication of herpes is the maternal-fetal transmission that may occur during pregnancy or vaginal delivery, resulting in central nervous system abnormalities or disseminated infection with in the neonate, with a 33 percent chance of death (Brown 1993; CDC STD Surveillance 2003).

C. Gynecological Morbidity in the Developing World

"Developing world" is a politically loaded term used by academicians and political analysts. The criteria for determining whether a nation belongs to the "developing" versus "developed" world are generally based on per capita income, but the specific definitions are rarely enunciated. However, the implications of "developing" status are relatively clear; a developing nation's infrastructure, economy and political stability are in a state of transition between "Forever Lagging Behind" and "Struggling to Catch Up" to more advanced countries.

Health care systems in the developing world often lack adequate medical supplies and facilities, partly due to limited resources and political instability. As a result, developing nations are usually associated with worse health indicators than their developed counterparts. For example, developing nations report higher infant mortality rates and shorter average life spans. They also have higher rates of gynecological morbidity.

The estimated worldwide incidence of STIs is 333 million. The incidence of RTIs each year is estimated as being even higher. The WHO reports that 150 million of the new STI cases occur in South and Southeast Asia alone. Specifically, each year there are 12 million new cases of syphilis, 62 new million cases of gonorrhea, 92 new million cases of chlamydia and 173 million new cases of trichomoniasis (Population Council 2004).

Studies in Africa, Latin America and Asia suggest that RTIs are both more common and more severe in developing countries. The prevalence of gonorrhea cervicitis was 10-40% in Africa, 2-18% in Latin America and up to 12% in Asia and the

South Asian subcontinent. In contrast, the prevalence of gonorrhea in the developed nations of Scotland, Switzerland and the United States have stayed below 6% (Wasserheit 1989).

RTIs are also more likely to cause a greater degree of morbidity among women in the developing world. The percentage of hospital admissions attributable to upper reproductive tract infections was 17-40% in Africa, 15-37% in Southeast and South Asia, and only 1.4% in Australia. Infertility is a consequence of RTIs in 50-80% of cases in Africa as opposed to 10-35% of cases in the developed world. Developing nations have a higher rate of ectopic pregnancies, another possible consequence of RTIs; the ratio of ectopic to intrauterine pregnancies in Benin was 1:88, compared with 1:109 in the United States (Wasserheit 1989).

Social and behavioral factors of developing nations are partly responsible for the higher prevalence rates of gynecological morbidity. Lack of resources and education may be the strongest explanation for the discrepancy between the developing and developed world. However, population and migration trends in developing nations may also affect the prevalence of female RTIs. For example, urbanization is a driving force for societal change in the developing world. A small yet sizable proportion of the young male population migrates from rural to urban settings in search of employment, and simultaneously finds sexual freedom. As the men engage in premarital or extramarital sex, they consequently increase the risk of STIs for themselves as well as their sexual partners (Wasserheit 1989).

Cultural traditions in the developing world may further perpetuate risky sexual behavior. Cultural groups within Asia and Africa have a taboo against intercourse during

menses and postpartum periods, creating a time window when men may be more likely to engage in extramarital sex. For example, in Ibadan, Nigeria, “wives are ‘available’ for intercourse with their husbands only 29 percent of the time,” leaving men with a significant period of time when the risk of engaging in extramarital sex is higher (Wasserheit 1989). Thus, global policies to address gynecological morbidity in the developing world must consider the economic, social and behavioral factors that contribute to higher risks of disease.

D. Global Plans and Policies for Gynecological Health

Historically, health care policies in the developing world have recognized women in their role as mothers. In sub-Saharan Africa, maternal and child health and family planning programs (MCH/FP) have provided antenatal, delivery, child health and contraceptive services since the 1970s. While some gynecological issues were addressed in association with pregnancy, RTIs were, for the most part, neglected. In 1988, the WHO’s Safe Motherhood Initiative focused international attention on maternal health, but continued to limit the perception of women’s health to motherhood.

Throughout the 1980s, RTIs, and particularly STIs, were seen as male health problems that needed treatment rather than prevention. The field of public health largely ignored STIs, devoting few resources and leaving detection up to self-diagnosis. The private sector and pharmacists were the only services available for the minority of patients who did not diagnose and treat themselves using therapies from traditional healers or home remedies.

The growing body of evidence that STIs were more prevalent among women than previously believed changed the way the international health world addressed infectious gynecological morbidities. In response to the large numbers of women presenting at primary health care clinics with STI symptoms, developing nations integrated STI management into existing MCH/FP services. The syndromic management approach was developed in the 1990s in order to clinically diagnose and treat STI symptoms in resource-poor settings where laboratory diagnoses were unavailable.

However, the integration of STI management with mainstream health care services was only partially successful. Syndromic management of the most prevalent RTI symptoms among women, such as vaginal discharge, was less than effective. Contrary to earlier beliefs and practices, evidence from the early 1990s proved that treatment of vaginal discharge should be based on the assumption that is unrelated to an STI. Furthermore, STI services were not adequately funded or properly managed by MCH/FP clinics, and the staff were unfamiliar with the diseases. The fact that RTIs and STIs cause PID, infertility, infant morbidity and compromise female reproductive capacity was not recognized (Askew 2003).

There were two major events that brought unprecedented attention to gynecological morbidity's impact on the health and daily lives of women. First, the International Conference on Population and Development (ICPD) in Cairo in September 1994 developed a Plan of Action that "emphasized, on the one hand, the empowerment of women and, on the other, an approach to reproductive health care" (Rao 1997). The general recognition of the magnitude of women's reproductive health problems was, at the same time, an admission of years of neglect. For the first time, the international

community articulated it as a priority “to listen to women’s voices and to articulate their concerns” (Pachauri 1994). This resulted in widespread recognition of the problems affecting poor women and the connection between socioeconomic development and the improvement in women’s reproductive health and child survival. Research studies conducted throughout the developing world found that gynecological health was correlated with economic opportunity, and fertility with child mortality (Pachauri 1994).

The ICPD changed the framework for addressing women’s health from MCH/FP to “Reproductive (and Child) Health” (RCH) programs. Optimal reproductive health has been defined as “the ability of men and women to undertake sexual activity safely, whether or not pregnancy is desired, and, if desired, for the woman to carry the pregnancy to term safely, deliver a healthy infant and be prepared to nurture it” (Pachauri citing Sai and Nassim 1989). Thus, reproductive health goes beyond the narrow realm of maternal health and family planning to address female sexuality in its own right. A more holistic approach to health, the RCH framework incorporates the social, cultural and political contexts that determine women’s social status, their reproductive rights and freedoms. It calls attention to the need for educating women about sexuality, contraceptive choices and the prevention as well as treatment of RTIs (Pachauri 1994).

While the ICPD recognized the problem, a worldwide call for action to combat RTIs emerged with the advent of an entirely intractable STI, HIV. Research studies in the last decade have shown that the STI epidemic “fuels the HIV epidemic” through direct, biological mechanisms (Ramasubban 2000). The presence of RTIs increases the likelihood that HIV, the virus that causes AIDS, will be transmitted from one sexual partner to another. Ulcerative STIs, such as syphilis and chancroid, greatly increase the

risk of HIV acquisition. The open sores and lesions of these diseases make it easier for infectious particles to be transferred, increasing the risk of infection by 3 to 9 times. HSV-2, one of the most prevalent STIs worldwide, doubles the risk of HIV transmission. Other RTIs that cause mucosal inflammation also raise the risk of HIV sexual transmission by increasing genital shedding of HIV infected cells and consequently increasing the viral load in genital secretions. For example, bacterial vaginosis may double the risk of HIV transmission; gonorrhea and chlamydia may increase the risk by three to five times (Population Council 2004).

Women are more susceptible to HIV infection than men for the same reasons that they are more vulnerable to all STIs (Ramasubban 2000). Worldwide, about 36.1 million people live with HIV and AIDS, more than 90% of them in developing countries and nearly 50 percent of them women. Women are also one of the fastest growing populations infected by the virus (Population Council 2004).

Social scientists and policy makers have therefore recognized that the early detection and treatment of STIs can play a crucial role in controlling the spread of HIV, particularly in the developing world where there is a substantial burden of curable STIs. The fact that STI control has not been regarded as a priority in its own right may be a reflection of the gender discrimination that continues to plague health care policy around the world:

It is ironic, indeed that that one of the few syndromes that currently has no curative therapy, AIDS, has recently done more to focus attention on the importance of RTIs in reproductive health than have all the data linking bacterial cervicitis and vaginitis syndromes with infertility, ectopic pregnancy, chronic pelvic pain, cervical neoplasia, and adverse outcomes of pregnancy (Wasserheit 1989).

Community intervention trials in the developing world have proven how management of RTIs and, particularly, STIs dramatically reduces the HIV incidence in high risk populations. In Mwanza, Tanzania, clinical treatment of symptomatic STIs over a two-year period resulted in a 38% reduction in HIV incidence. This reduction in HIV transmission was solely attributed to an improvement in STI treatment, as there was no association with changes in sexual behavior and condom use (Fleming 1999).

WHO and UNAIDS have urged nations around the world to invest in STI clinical services as an essential component of their HIV prevention programs (Fleming 1999). Since endogenous and iatrogenic infections are also associated with an increased risk of HIV transmission, the entire range of RTI services may be incorporated into national HIV/AIDS programs. The advantage of including RTIs with HIV/AIDS services, as opposed to the MCH/FP (or RCH) programs, is the potential to reach more unmarried, non-pregnant women who may be at high risk of HIV infection. The problem of this approach may be the limited ability to engage women through HIV programs that carry strong social stigma. At this point in time, “although STI services now have a much higher profile than previously, and are consistently embraced as a key service within the *concept* of sexual and reproductive health, service provision at country level remains programmatically disjointed and disorganized. STI services are not widely provided ... and are still mostly not reaching those who most need them” (Askew 2003).

As the second most populous nation in the world, India is a leader among the developing world and its health care policies have global repercussions. India is at risk of being overwhelmed by HIV, with infection rates doubling every two years (Ramasubban 2000). As in other countries, the high level of untreated STIs in India is a major factor in

the rapid spread of HIV. India's response to the epidemic of RTIs that has disproportionately affected its most vulnerable female populations remains to be seen.

Chapter 3

Gynecological Morbidity in India

A. Historical Background

During the twentieth century, Maternal and Child Health and Family Planning (MCH/FP) programs dominated health care services for women in India. Family planning initiatives were introduced as early as the 1920s and birth control was the focus of the 1928 All India's Women's Conference. A Family Planning Program was outlined in 1951 which spoke of "securing women's health" but took action only to combat early marriage and frequent pregnancies (Rishyasringa 2000).

Fertility control would continue to be the focus of intervention in women's health for the next thirty years. The 1961 Census alerted policy makers to the impending population crisis and shifted all Family Planning Program efforts towards birth control. Annual targets were set and the pressure to meet them fueled a public policy that favored more expedient, effective forms of contraception – namely, sterilization or female tubectomy. Monetary incentives for women to accept sterilization drew sharp criticism from many factions of society, including service providers and voluntary health agencies. However, this "method-specific" government approach remained the predominant force governing women's participation in India's health care system until the late 1980s (Rishyasringa 2000).

Research studies showed that a more holistic approach to women's health further reduced fertility, the goal of India's reproductive health policy (Pauchari 1994 citing Jejeebhoy 1991; Dyson and Moore 1983; Cleland and Van Ginneken 1988). While evidence pointed towards the benefits of addressing a broader range of health issues,

India's health policy broadened its scope only enough to include maternal health care services. After the 1988 WHO Safe Motherhood Initiative that raised international concern for maternal health, India's government launched a National Perspective Plan for Women and established a task force to address maternal mortality and morbidity (Pachauri 1994).

A series of initiatives in the early 1990s continued to focus on the network of primary health centers that provide services for mothers and children, such as nutritional supplements for pregnant or lactating women and their children. The 1992 Child Survival and Safe Motherhood program further strengthened the medical component of maternal and child health policy by training personnel as birth attendants to perform safe deliveries and address neonatal health concerns. Women in India were therefore engaged in the nation's health care system primarily in their role as mothers, and consequently lacked health care services for issues that did not directly impact their motherhood. In other words, "since the programme [recognized] women only when they are pregnant, in most cases, pregnancy [provided] the only point of contact between the woman and the health service system" (Pachauri et al 1994). Historically, then, "in India, as in other developing countries, women's reproductive health programmes for the most part have meant organizing services for family planning and maternal health or the traditional 'M' of MCH (maternal and child health)" (Pachauri 1994).

At the same time, national efforts to address women's health in broader terms continued to be launched, if only on paper. The National Commission for Self-Employed Women remained active in bringing attention to women's needs. The early 1990s brought together researchers, NGOs and activists to formulate a chapter on Women and

Development for India's Eighth Five Year Plan. A superficial commitment to women's issues on a national level remained steady, with task forces dedicated to revising program goals.

Finally, in 1994, Indian national health policy planners, activists and NGO's openly debated women's health care issues and, for the first time, listened to the concerns of poor women. The Indian government launched a new direction for the Family Welfare Program—one that redefined it as a reproductive health care (RHC) approach in line with the agenda set by the ICPD (Rao 1997). While the RHC strategy continues to promote maternal and child health services, it provides resources for women's health concerns outside of the family planning or motherhood paradigm (Pachauri 1994).

Changing to an RHC service has called for a shift of focus from population control and demographic targets to women's empowerment and reproductive rights. The central principle of the RHC framework is that "every woman has the right to control her own sexuality and reproduction without discrimination based on age, marital status or income" (Rishyasringa 2000). Carrying out this ideology at the level of service delivery requires a reorientation of what constitutes quality of care. Health care personnel need skill-training in counseling and intervention for issues related to the male role in infertility, domestic violence, and adolescent sexual education. Most importantly, services must be gender-sensitive, giving women "the freedom to make their own decisions about their fertility, childbearing, gynecological health and sexual activity" (Rishyasringa 2000).

An important component of this shift towards RHC services is addressing gynecological morbidity. The emergence of HIV in India has directed more attention to

equipping clinics to prevent, diagnose and treat all forms of RTIs. Health care personnel must be trained to educate the population about disease prevention and transmission. Such programs require funding which, in turn, require strong advocacy. Until recently, very little information on gynecological morbidity in India has been available to garner interest among potential advocates. Over the past decade, there has been a growing body of evidence documenting the extent of gynecological morbidity in India and setting the stage for health care advocates to take action (Rishyasringa 2000).

B. Prevalence of Gynecological Morbidity in India

National prevalence figures for gynecological morbidities remain elusive, but several community-based studies have documented that poor women in India have a high burden of morbidity. The landmark study by Drs. Rani and Abhay Bang in 1989 alerted public health officials nationally and internationally to the magnitude of reproductive health problems unrelated to pregnancy in India. As one of the first population-based surveys of structural and functional disorders of the female tract other than abnormal pregnancy, delivery or puerperium, the Bang study “triggered a decade of research on gynecological problems in India” (Oomman 2000).

Bang et al. conducted the study in two villages in the Indian state of Maharashtra. The participants were females who were at least 13 years old or who had reached menarche. The study found that 92 percent of the 650 women had one or more gynecological or sexual diseases and the average number of these diseases per woman was 3.6 (Bang 1989).

The bulk of diseases detected by clinical or laboratory exam were infections, including both lower and upper reproductive tract infections. The most common diagnosis was bacterial vaginitis, detected in 62 percent of the women. Dysmenorrhea was diagnosed in 57 percent of women, followed by cervicitis in 49 percent of women.

The average age of the study sample was 32.11 and the mean gravidity was 3.99, suggesting that the women in this community were married and sexually active at a relatively young age (Bang 1989). This is consistent with national data that shows the average age at the time of marital consummation is 17.4 years (IIPS NFHS-2 2000). As has been discussed, young age of onset of sexual activity potentially increases the risk of RTIs because of prolonged exposure to the risky behavior of a sexual partner.

This risk has been corroborated by other community-based studies that document a high prevalence of RTIs among young women throughout India. A review of eight community-based studies on ever-married women of reproductive age in different regions of India represents the range of prevalence rates for specific morbidities. The studies were conducted by four different primary researchers who assessed gynecological morbidity in the following eight communities: urban and rural Gujarat, rural Rajasthan, urban and rural Maharashtra, rural Tamil Nadu, rural West Bengal, and both urban and rural Karnataka. The variety of settings is matched by the variety of design and methods used in the studies. However, with the exception of the Tamil Nadu study which used a sample of married adolescent women between 16 and 22 years old, all the studies focused on ever-married women of reproductive age (Oomman 2000).

As seen in Table 3.1, there was a wide range of prevalence rates for gynecological conditions, partly due to variations in actual levels but also due to differences in criteria

used for diagnosis. For example, three studies defined vaginitis as inflammation of the vaginal wall with abnormal discharge, while another three studies defined it as inflammation with or without discharge. Laboratory diagnoses were available in only four of the studies (Rajasthan, rural Maharashtra, Karnataka and Tamil Nadu) and were used to test between 3 and 6 different diseases.

Bacterial vaginosis had the highest prevalence with an infection rate of 62 percent among rural Maharashtran women in the Bang study. However, no other studies detected bacterial vaginosis at even half that rate, the closest being 30 percent for vaginitis in rural Rajasthan and 18.2 percent for bacterial vaginosis in Karnataka. Cervicitis was also most prevalent in the Bang study at a rate of 48.7 percent. In fact, the Bang study reported the highest prevalence rates for 6 out of the 10 clinical and laboratory diagnoses listed in Table 1.2. Again, this may reflect both a higher burden of morbidity in that sample as well as a broader set of criteria used for diagnosis in that particular study (Oomman 2000).

As a whole, approximately 26 to 77 percent of women were clinically observed to have at least one gynecological morbidity. Approximately 55 to 100 percent of women reported one or more gynecological symptoms. Up to 68 percent of women complained of abnormal vaginal discharge and up to 65 percent reported menstrual problems. Self-reported symptoms may be poor predictors of disease, particularly for RTIs, but may be more reliable for more obvious conditions such as genital prolapse. Thus, clinical, laboratory and self-reported data must be considered together in order to draw the most complete picture of gynecological morbidity (Oomman 2000).

Table 3.1 Prevalence of Reproductive Tract Infections from Eight Community-based Studies: Clinical, Laboratory, and Self-Reported

Prevalence	Percentage
Clinically-assessed prevalence	
Vaginitis	3.8 – 30
Cervicitis	8 – 48
Cervical erosion	2 – 46
Pelvic Inflammatory Disease	1 – 24
Genital prolapse (vaginal and/or uterine)	<1 – 27
One or more morbidity	26 – 77
Laboratory assessed prevalence	
Bacterial vaginosis	14 – 62
Candidiasis	2 – 34
Trichomoniasis	<1 – 14
Gonorrhea	<1 – 3
Chlamydia	<1 – 2
Syphilis	<1 – 10
Self-reported symptoms to assess prevalence	
Menstrual problems	33 – 65
Abnormal vaginal discharge (amount, color and texture)	13 – 68
Lower abdominal pain	9 – 21
Lower backache	5 – 39
Dyspareunia	1 – 7
Prolapse	<1 – 10
One or more reported symptoms	55 – 100

Oomman 2000

Aside from these community-based studies, the only sources of information on the prevalence of diagnosed diseases on a national level are hospital-based studies of patients attending STI clinics. Since up to 60 percent of the women who attend these clinics are commercial sex workers, the results of these studies can not be generalized to the female population of India. However, several trends in the diagnostic profiles of these studies are worth noting. Namely, syphilis is the leading STI, accounting for approximately 30 percent of female patients attending STI clinics. The category of genital ulcer diseases, which includes syphilis, chancroid and HSV, accounts for nearly 75 percent of STIs diagnosed at these clinics. While bacterial and treponomal STIs dominate the national STI profile, viral STIs are on the rise. Sex workers continue to be reported as the main

source of STI infection by the majority of patients around the country. Finally, the average age of STI clinic patients is decreasing, and the number of female patients visiting STI clinics is rising (Ramasubban 2000).

The second National Family Health Survey (NFHS-2) in India, conducted by the International Institute for Population Sciences in 1998-1999, presents the most accurate picture of reported symptoms of gynecological morbidity on a national level. Thirteen field organizations in India conducted the household survey in all 26 states. The published report of the NFHS-2 represents the data from 25 of the 26 states, since data collection from Tripura was delayed.

The NFHS-2 sample is 89,199 women ages 15 to 49. The survey consisted of three questionnaires: the Household Questionnaire, the Village Questionnaire, and the Women's Questionnaire, which collected information on gynecological health from all ever-married women age 15 to 49 who were residents or visitors of the sample households. Almost all (94%) of the respondents were currently married, and 89 percent lived with their husbands. A majority (58%) were illiterate and approximately 60 percent belonged to scheduled castes or backward classes (IIPS NFHS-2 2000).

Approximately 2 out of 5 women reported at least one gynecological health problem related to vaginal discharge, urination or intercourse during the three months preceding the survey. About 30 percent of the women reported abnormal vaginal discharge. As shown in Table 3.2, between 5.7 and 20.8 percent report vaginal discharge accompanied by itching, irritation, bad odor, fever or severe abdominal pain. About 13 percent of married women reported painful intercourse and about 2 percent reported bleeding after intercourse. In general, the prevalence of gynecological symptoms was

similar for women from different education, religious and family backgrounds (IIPS NFHS-2 2000).

Table 3.2 Percentage of ever-married and currently married women reporting symptoms of gynecological morbidity in India 1998-1999

			Vaginal discharge accompanied by:					
	Sample Size	Any abnormal vaginal discharge	Itching or irritation	Bad odor	Severe lower abdominal pain	Fever	Painful intercourse	Bleeding after intercourse
All ever-married women	89,199	29.7	17.1	11.3	18.6	8.1	NA	NA
All currently married women	83,649	30.0	17.3	11.5	18.7	8.1	12.5	2.3

NA = Not Applicable

IIPS NFHS-2 2000

Only one third of the women experiencing symptoms sought any form of medical advice or treatment. Women from urban areas (45 percent) were more likely to seek treatment than women from rural areas (31 percent). Women who did seek treatment preferred private medical services to public medical services by a ratio of three to one (IIPS NFHS-2 2000).

The NFHS-2 data documents a high prevalence of self-reported gynecological problems across all groups of Indian women, and, at the same time, a high degree of reluctance to seek advice or treatment. This suggests that gynecological morbidity is widespread in India, and that a more accurate national profile of diagnosed diseases is needed. The WHO estimates 40 million new cases of STIs in India each year, making it the “the third most important set of infectious diseases in the country after malaria and tuberculosis” (Ramasubban 2000). The significance of monitoring RTIs is highlighted in the context of HIV infections, estimated at approximately 11.5 million in India, the

largest number in any country in the world (Kumar 1999; Abdelwahed 2004). As will be seen, documenting the prevalence of gynecological morbidity in India involves a complex process of understanding physical symptoms and diagnoses, as well as cultural norms.

C. Cultural Context of Gynecological Morbidity

Women's perceptions of gynecological morbidity are influenced by cultural norms and socioeconomic status (Oomman 2000). The cultural context in which women experience symptoms of gynecological morbidity shapes their definitions of normal and abnormal.. For example, a study of women in rural Maharashtra showed that women perceive white vaginal discharge to be a normal part of sexual maturation but also a reflection of immoral sexual behavior. The study quoted one woman as saying, "Like every tree has flowers, every woman has white discharge... except it's not soothing like a flower" (Oomman 2000 quoting Bang et al 1994).

At the same time, white discharge has been linked to mental health, tension, STIs. In some clinical services it is the leading cause of women seeking treatment (Schensul et al 2003). Evidence suggests that women believe it is a consequence of their husband's involvement with commercial sex workers, their own sexual dreams or desire, witchcraft, or black magic. Because of the moral connotations of white discharge, women may be hesitant to use the term "safed pani" when reporting their symptoms. Instead, they report weakness or backache which they often experience concurrently with their symptoms of white discharge. Women use euphemisms for their real problem in order to avoid shame

or embarrassment. However, when asked directly, they often describe white discharge as their most severe gynecological complaint (Oomman 2000; Pachauri et al 1994).

A study of women in rural Rajasthan found that women “consider economic livelihood to be their first priority and perceive the basic lack of livelihood to be the root-cause of all illnesses” (Oomman 2000). Women attribute a range of gynecological symptoms to a combination of moral and economic factors that include lack of food, eating “hot foods,” extramarital sex, heavy physical work, sterilization and abortion procedures. Similarly, the effects of these symptoms go beyond the biological repercussions and are perceived as causing weakness, anxiety, stress and, most notably, lack of productivity. The costs of gynecological morbidity are therefore not only the doctor’s fees that may inhibit economically challenged women from seeking treatment, but also the disruption of their daily lives and responsibilities (Oomman 2000).

Thus, beyond their biological susceptibility, women experience significant social and economic burdens that influence their perception of gynecological morbidity and consequently their treatment-seeking behavior. The sociocultural basis of their perception of morbidity “can be correct and protect women, or it can be incomplete and erroneous and render them more susceptible to infection.” Therefore, all dimensions of gynecological morbidity—biological, social and economic—need to be explored in order to understand the role it plays in the lives of women in India (Oomman 2000).

Chapter 4

Methodology

A. Overview of Project

With projections of HIV infecting the largest number of individuals in the world, India is the site of a growing number of research projects and interventions aimed at reducing the rate of STIs. Previous studies have determined that men are the major vectors of disease transmission by engaging in premarital or extramarital sex. While the current ratio of infected men to women is 3:1, the proportion of infected women is increasing as a result of men having risky sex and then having sex with their wives (Mekki-Berrada 2004). Men and their sexual behaviors have therefore emerged as a focus of research and intervention for reducing the risk of disease transmission in the general Indian population.

A joint Indo-US research team launched a project entitled RISHTA, an acronym for Research and Intervention in Sexual Health: Theory to Action that means “relationships” in Hindi. The project is a collaboration between the International Institute of Population Sciences (IIPS; Mumbai), the Institute for Community Research (ICR; Hartford, CT) and the Center for International Community Health Studies of the University of Connecticut School of Medicine (UCONN; Farmington, CT). The National Institute for Mental Health awarded the international team a five-year grant (2001-2006), entitled “Male Sexual Health Concerns and the Prevention of HIV/STD in India.” The aim of the project is to engage men in sexual risk reduction and early treatment of STIs and HIV (Mekki-Berrada 2004).

In 2002, the RISHTA project was awarded a supplementary grant from the Office of AIDS Research, “Assessing Women’s Risk for HIV/STD in Marriage in India” (2002-2004) (Sharma 2004). The grant came in recognition of the need to address the health concerns of the wives of men in the project. The marital unit carries significant risk of disease transmission for a subset of women in relationships with men who engage in risky behavior. Studies of women in low-income urban communities in India have shown that they have little knowledge of their husbands’ extramarital sexual activity, cannot recognize STI symptoms and have limited ability to negotiate condom use. Furthermore, their husbands may restrict their mobility, limit their access to education and services and force them for sex, which increases the risk of disease transmission through tissue tearing.

The RISHTA office, located in Mumbai, India, on the campus of the International Institute of Population Sciences is home to a team of anthropologists, demographers, psychologists and physicians who are committed to improving the sexual health of both men and women. Situated on the outskirts of Mumbai, the RISHTA team has developed a relationship with nearby communities that are appropriate sites for their current research and interventions. As will be seen, the communities selected for the project represent the disease burden and treatment challenges of many urban communities in India and the developing world.

B. Selection of Study Communities

The city of Mumbai has been severely impacted by the spread of STIs and HIV. Among patients attending STI clinics in the city, the percent of HIV positive individuals

has risen from 1.6 in 1987 to 64.4 in 1999. Correspondingly, HIV prevalence in the city has risen from 1 percent in 1993 to 3 percent in 1999 (UNAIDS 2000). Approximately 2 to 4 percent of pregnant women attending public hospitals have tested positive for HIV (Maniar 2000).

The RISHTA project is being conducted in Mumbai in 3 low-income communities about 10 kilometers from each other. They have a total population of about 700,000. Surveillance data collected by NGOs has documented a high rate of STIs in these communities that have limited access to health care services. The research team at IIPS and one of the 3 study communities have been engaged in ongoing research since 1988. IIPS familiarity with all 3 communities make them easily accessible to the RISHTA(Singh interview 2004).

With low per capita incomes and rapidly rising populations of village migrants and illegal settlers, these “slum” communities’ residents are at risk of STIs and other gynecological morbidity. A significant portion of the men leave their wives in the village and move to Mumbai alone in search of employment. During the separation, the men are at higher risk of engaging in extramarital sex. After the women join their husbands in Mumbai, sexual intimacy is often inhibited because of the presence of numerous family members living in a very small space. Consequently, 23% of married men in these communities report that they have engaged in extramarital sexual intercourse (Sharma 2004).

The promiscuous behavior of men in these communities inevitably places their wives at risk of STIs. Nearly three-quarters of men engaged in extramarital sex had relations with a woman in their community or a neighboring community, but only one-

quarter of them used a condom in their last sexual encounter. This suggests that wives and women in the community who have relations with these men are at risk. Of the 30% of men engaged in extramarital sex with a commercial sex worker; only 58% used a condom in their last sexual encounter (Sharma 2004). Thus, sociocultural and economic risks aside, women in the selected communities are at high risk of carrying a significant burden of gynecological morbidity.

C. Data Collection

The methodology of this project combines qualitative and quantitative data collection. The methods are presented in the order that they were conducted. Several methods were conducted concurrently and are ongoing.

In-depth interviews

In-depth interviews conducted with men and women served as the initial form of data collection on reproductive health issues in the study communities. Male members of the RISHTA staff met individually with 52 married men between the ages of 21 and 40. Similarly, female RISHTA staff members interviewed 66 married women age 21 to 40 (Sharma 2004).

Women were asked about several domains of their lives, including their lifestyle, relationships, physical condition, sexual knowledge and experiences. In discussing their physical condition, women spoke about their reproductive history and health problems. Several women spoke at length about their perceptions of the etiology, consequences and treatment of various symptoms of gynecological morbidity. The interviews were

transcribed into Microsoft Word and coded in Atlas.ti, a computer-based text search program.

Baseline Surveys

Information from the in-depth interviews was used to develop a baseline survey instrument (BSI), one for the male and one for the female population. Each BSI was piloted on a sample of about 20 men and women and revised into a final version. The Male BSI (MBSI) was administered to a systematic random sample of 2400 married men between the ages of 21-40 in the three communities. A randomly selected sub-sample of 640 men was tested for STIs (gonorrhea, syphilis, HSV-2 and chlamydia).

The Female BSI (FBSI) was conducted with 210 randomly selected wives of the men who underwent testing. Similar to the MBSI, the FBSI contains a wide range of questions that address the issues raised during the in-depth interviews. There are 27 sections in the FBSI, beginning with socio-demographic factors and leading into assessments of emotional reactions and marital relations. Of most importance for this paper was the section asking women about their gynecological symptoms. Women were asked individually about each of 32 different gynecological symptoms. They were first asked if they ever experienced the symptom, and if so, if they had the symptom in the past 3 months and if the symptom was “very severe,” “somewhat severe” or “not severe.”

Women were asked details about their patterns of treatment for each symptom. First, they were asked if they took any treatment at all, by themselves or from a health care practitioner. If the woman replied that she went to a health care provider, she was asked for the name of the provider, location and his or her training background (ayurveda, unani, homeopathy, allopathy, chemistry). She was also asked about the type

of medication (Zadi buti or ayurvedic, English, Homeopathic, Home Remedy) and whether the treatment provided complete, partial or no relief. Finally, she was asked if she was currently continuing with the treatment and the full details of all further treatment encounters for that same symptom.

Women were further asked about the negative effects that each symptom had on various aspects of their lives. They rated the negative effects of the symptom as “very much,” “somewhat,” or “not at all” on their sexual life, marriage, self-image, health and family life. In addition, they estimated their own and their husband’s risk of getting a sexually transmitted disease as “high,” “low,” or “no risk.” Finally, a series of 11 true and false statements were used to assess their knowledge of sexually transmitted diseases.

Interviews with the women were arranged through male RISHTA staff members who are well acquainted with their husbands through their participation in the male sexual health project. Due to the sensitive nature of the FBSI and the cultural norms of the community, male staff members of RISHTA first inform the husbands that female RISHTA staff members would like interview their wives. At times, husbands agree to an interview and the female researcher accompanying the male researcher proceeds immediately with the interview; at other times, husbands agree for the female investigator to return on an appointed date and time to conduct the interview. When the female investigator returns on the appointed date, she may either be welcomed or refused by the husband or wife.

Informed consent is obtained from each woman at the beginning of the interview. Interviews were conducted in Hindi or Marathi, most often within the woman’s home, the home of a neighbor, or in a public space in the immediate vicinity. The interview lasted

between 30 and 90 minutes, depending on the verbosity of the respondent the number of interruptions from curious onlookers or household duties. At the conclusion of the interview, the female investigator scheduled the woman for a gynecological exam and STI tests at the Women's Project Health Clinic, preferably within a two week period.

Women's Project Health Clinic

RISHTA and Nair and Rajiv Gandhi Medical Colleges of India have opened a Women's Project Health Clinic to involve the respondents of the FBSI in gynecological care and reproductive health outside of pregnancy and delivery. The clinic is located in a government health center accessible to all three study communities. During the clinical encounter, women receive a gynecological exam, STI tests, appropriate therapy and plans for follow-up.

On the day of the appointment, a staff member of the RISHTA Women's Project accompanies the FBSI respondent to the clinic. Prior to the appointment, Dr. Sumitra Sharma, Women's Project Coordinator, prepares a clinical record that contains the respondent's demographic and symptom profile as reported in the FBSI. When the respondent arrives at the clinic, a medical intern from the Medical Colleges conducts a brief interview about any current health complaints and confirms the demographic information and symptom history. The intern also records each woman's height, weight, and blood pressure.

The respondent then proceeds to the laboratory in the government health center where a phlebotomist draws 5 milliliters of blood that will be tested for chlamydia, syphilis and HSV-2. The samples of blood are sent for processing to OSB Diagnosis, a laboratory located near the health center.

After providing a blood sample, the respondent goes to the patient examination room where Dr. Shirodkar, Head of the OBGYN Department at Nair Medical College, conducts a gynecological exam. Dr. Shenoy, a faculty member of the Department of Preventive and Social Medicine, assists Dr. Shirodkar. All clinical components of the Women's Project Health Clinic are overseen by Dr. Radha Aras, Head of the Department of Preventive and Social Medicine at Nair Medical College.

During the gynecological exam, Dr. Shirodkar collects vaginal discharge specimens for the following diagnostic tests:

- Vaginal pH (using litmus paper that changes color to indicate degree of acidity to distinguish between different causes of vaginitis)
- Wet mount (microscopic examination of vaginal specimen with saline to detect motile trichomonads or clue cells suggestive of bacterial vaginosis)
- AMINE test (the addition of 10 percent KOH to vaginal specimen to detect a strong fishy odor suggestive of bacterial vaginosis)
- Hydrogen peroxide test (microscopic examination of vaginal specimen with hydrogen peroxide to detect an abnormal number of white blood cells suggestive of trichomoniasis)

Dr. Shirodkar also collects an endocervical sample to be cultured for N. gonorrhea, Chlamydia Trachomatis, Trichomonas vaginalis, Streptococcus pyogens and Ureaplasma urealyticum. Dr. R.N. Bharmal, Head of the Department of Microbiology at Rajiv Gandhi Medical College in Thane, India, directs all on-site and off-site laboratory investigations of vaginal and endocervical samples.

Dr. Shirodkar examines and treats the women at no cost. Medications provided by the RISHTA project are distributed to the women as needed, also free of charge. Each woman has a one week follow-up appointment at the clinic for further treatment and to learn the results of her blood and culture tests.

Data from the FBSI is entered into SPSS on a weekly basis. Since the frequency of clinic operations has been sporadic throughout the duration of the Women's Project, data from the clinical exam and laboratory tests is entered on a rolling basis. The data analysis is carried out in several stages.

My role

As a fourth year medical and public health student at the UCONN School of Medicine, I was introduced to the RISHTA project in August 2003. At that time, I began to work with Dr. Stephen Schensul in formulating the nature and scope of my Master's Thesis in Public Health. With consideration of my interests, clinical background and time limitations, we focused my thesis on the Women's Project and, in particular, women's symptoms and clinical presentation of gynecological morbidity.

After spending the first half of the academic year conducting an extensive literature search on gynecological morbidity in the developing world and India, I scheduled a trip to Mumbai in February 2004 to gain first-hand experience in the field of study. The aim of my visit was to contribute to the research goals of the Women's Project while collecting observational and qualitative data to develop a strong thesis. My plan of activities for the month included interviews with key informants from the RISHTA project and study communities as well as orientation to the field and observation of interviews for the FBSI. Applying my medical background, my principal

role was to observe and assist Dr. Shirodkar in the clinical examination of women at the biweekly Women's Health Clinic.

However, upon my arrival, I had to adjust my plan of activities due to unanticipated changes in the schedule of the Women's Project. By the second week of February, 66 in-depth interviews with women had been completed, the FBSI had been piloted on 23 women and the final FBSI had been administered to 24 women. Clinical exams and laboratory tests were performed on 13 of the pilot interviewees and 5 of the final FBSI participants. Unexpectedly, the Women's Project Health Clinic was suspended in the week prior to my arrival due to an IRB review. The Clinic could not restart until IRB approval was confirmed and there was no indication of how long that process could take. Therefore, I had to plan to make the most of my time in Mumbai with the assumption that I would not have the opportunity to participate in the Women's Clinic.

I therefore redistributed my four weeks in Mumbai to include more field visits with female RISHTA staff members and more time observing the activities of the Men's Project. I observed several FBSI interviews and conducted my own interviews with participants, translated by RISHTA staff. I learned details about the resources of the study community, the site of the first group of pilot and final FBSIs and the source of all preliminary data analysis. To gain a greater appreciation for the health care services available in the community, I spoke with a graduate student about her Ph.D. research on the various medical systems used by local women and I conducted an in-depth interview with one of her research participants.

The Men's Project began in 2001, one year before the Women's Project. It was in its intervention phase and served as a valuable source of ideas for possible approaches towards improving women's gynecological health. There are three levels of intervention of the Men's Project: the community, provider and patient. One form of community intervention that I observed was the street play, a spontaneous enactment that communicates messages about male sexual health problems and STIs. Through a contract with RISHTA, members of the Community of Resources Organization (CORO) have been performing street plays in the three study communities as part of the intervention phase of the male sexual health project. Since January 2004, the street plays have been an effective means of educating hundreds of people about male sexual health problems. They also raise questions from men who are concerned about certain symptoms—these questions can be followed up at the RISHTA Male Health Clinic held in the community health center.

On the provider level, the RISHTA Men's Project held educational seminars for health care providers to build their skills in collecting information from patients and diagnosing as well as treating male STIs. I spent time observing these providers and the nature of their practice, the patient population and range of clinical presentations. The Male Health Clinic at the community health center provides intervention at the level of the patient, and is the place men can go to address their sexual health concerns. Although I saw the rooms and facilities of the Male Clinic, I did not witness any patient-provider interactions since my presence would likely interfere with the frankness of the exchange.

Finally, I took the opportunity to familiarize myself with the operations of the community health center and other health care facilities in the community. I spent

several mornings and afternoons observing the antenatal and general outpatient clinics at the health center. I visited the community Health Post, a satellite government health office that serves as the home base for community health workers who track and record the medical histories of families living in the surrounding neighborhoods. I also received a tour of the local government hospital, Shitabdi Hospital, which serves as the primary site of delivery for pregnant women in the study community.

My goal in this thesis is to integrate the qualitative information that has been collected by me and the RISHTA research staff with the quantitative data gathered to date and present a picture of gynecological morbidity among women living in the study community. The 66 in-depth interviews of women coded into Atlas.ti and my own interviews and observations are my primary sources of qualitative information. The quantitative information comes from a data set that is the merger of 20 pilot and 70 final FBSIs conducted in the study community. I analyzed the data from a total of 90 women using factor analysis and SPSS. Therefore, my thesis is based on the preliminary results of data analysis representing one of the three study communities in the Women's Project.

Chapter 5

The Study Community

A. Socioeconomic and Demographic Profile

On a typical afternoon in the study community, children crowd the alleyways to play a pick-up game of cricket, oblivious to the open sewers that line their path. Goats pick through piles of garbage that clutter the roads, and flies swarm about the ripe bananas that rest on carts, waiting to be sold to those who can afford it. Young men loaf about the streets with nowhere to be and no one to expect them. A young girl, carrying an air of maturity beyond her years, rests an infant on her hip and mouths the words to the Hindi music serving as the soundtrack to this not-so-Bollywood scene.

The study community is an hour's drive but a world away from the swanky downtown of Mumbai, the heart of the nation's film industry. On the site of what was originally a garbage dump, the study community was constructed as a means of accommodating the large wave of migrants flocking to Mumbai more than fifty years ago. The community is the poorest of the three study sites. Although the laughter and smiles of the children do not show it, daily life in the community is hard.

The study community is rapidly expanding yet underdeveloped, with a population climbing above 100,000. As the community struggles to meet the demands of its growing population, piles of rocks and dirt dispersed on the streets are the signs of unfinished construction projects. Urban planning designed the study community as a grid of lanes and roads that form 48 "plots," each with an area of approximately 60,000 to 62,500 square feet. About 60 to 65 households are within each plot, and each house has an average of 6 people living in a space of 200 to 300 square feet (MBSI). Most houses

have two floors constructed of bricks, sand, cement or asbestos sheets. A public health officer stationed near the study community explained that the community was initially planned with the appropriate amount of space for housing. However, as the population swelled, houses were constructed on top of each other or divided into four rooms. As a result, “four families are now staying in a place which was initially allotted for one family” (Sharma 2003).

All houses have electricity, through either legal or illegal connections, and about half have televisions, but nearly none have running water or a private toilet. Water supply lines to private houses and common water taps are poorly maintained, often requiring people to wait for hours in line to collect water from the few lines that work. Public toilet facilities are dirty and crowded with people waiting their turn. Consequently, many people prefer to use the open drainage system, which is often clogged by plastic and paper trash carelessly discarded. The crowded living conditions and open sewage system create an unsanitary environment that serves as a breeding ground for pestilence and disease; during the floods of the rainy season, it is no less than a public health nightmare (Sharma 2003).

Despite the challenging conditions, the people in the community usually live peacefully together in mutual respect of each other’s religions and cultures. The majority of the population is originally from central and northern states of India, such as Uttar Pradesh, Bihar, and Madhya Pradesh (Sharma 2003). Of the 90 women responding to the FBSI, about half were born in Mumbai while the other half moved to Mumbai with either their natal family or, more likely, their husband (FBSI).

About 45 percent of the population is Hindu and 55 percent is Muslim. More than 85 percent of women consider themselves and their husbands very or somewhat religious (FBSI). Contrary to media images of perpetual religious violence, the two religions usually live harmoniously in this community, often sharing close friendships and even intermarriage (Sharma 2003).

The population is relatively young with large families. The average age of women interviewed for the FBSI was 29; while there were no age criteria for the women, they were wives of men from the MBSI who had to be between 21 and 40 years old. Half of the women had two or more children and the majority had been pregnant at least 3 times. All women had their first pregnancy before the age of 25; more than half of them were pregnant by the age of 19. Only 50 of the 90 women interviewed were currently using any form of birth control or family planning, the most common method was female sterilization, used by 29 women (FBSI).

The community is poor, with about 15 percent of the population from the “Scheduled Castes,” formerly known as “Untouchables.” Most men in the community work as daily wage laborers or in petty businesses, such as selling household items, packaging units, tailoring, servicing factories or shoe making. Others work as bus, autorickshaw or truck drivers. Between 5 and 10 percent temporarily work in the Middle East, and about 15 percent of the men are unemployed (Sharma 2003).

Most women are unpaid homemakers. Of the 90 women responding to the FBSI, only 15 stated that they earn an income, ranging from 250 to 3000 rupees per month (FBSI). Some women earn wages by working from home. For example, embroidery,

packaging, making watchbands and rubber bands allow women to be the primary wage earner of the family while remaining inside the house (Sharma 2003).

. Educational levels are low, barely 5 percent of the population have completed secondary school. A full one-third of women has had no schooling. About 25 percent of the population are non-literate; among women, this rate is 40 percent (FBSI; Sharma 2003).

Unless parents can afford to send their children outside of the community, there is no option of completing a secondary education. Three municipal schools cover the first seven grades, and only one municipal school goes up to the 10th grade. A technical training center once taught local youth marketable job skills but has closed due to higher enrollment from outside the community (Sharma 2003).

Despite their poor, unsanitary environment, people in the community are reluctant to leave their surroundings. Apparently, the Indian government has built alternative housing for the people living in the study community and its neighboring slums. The new housing offers better facilities, water supply and sanitation. Yet, many people choose to stay in the study community and rent new government housing as a source of income. According to Dr. Sharad S. Narvekar, Project Coordinator of RISHTA at IIPS, people living in the slums do not take the opportunity to lead a healthier lifestyle because they are resistant to change. “People refuse to shift to better housing and facilities because they do not want to leave their familiar spot,” he said. “Social scientists can play a role in precipitating a mentality that is more open to change by working with community leaders who can influence the people” (Narvekar interview 2004).

B. Political and social organizations

There are numerous sources of influential power in the community. Religious leaders are important opinion leaders for many community members. Important businessmen or politicians play significant roles for others. Some people in the community respect the advice of multiple people of different backgrounds.

In terms of politics, the study community is home to several active political parties. Every five years, municipal elections determine which party dominates. The last election placed the Congress Party in power, with six members holding municipal level positions as “corporators.” However, members of the Shiv Sena Party, a Hindu nationalist party, play prominent roles in the daily life of the community by serving as intermediaries between the people and the administration. For example, when a member of the community needs to obtain a business license, enroll their children in school, or secure electric connections, he approaches a Shiv Sena representative who navigates the bureaucratic system for them.

Several NGOs play significant roles as health educators and social workers in the community. For example, Apnalaya has 150 staff members who operate various services under the Reproductive and Child Health Care Program, including weekly health clinics, antenatal education and clinics, and immunizations. They conduct awareness campaigns on reproductive health issues, particularly HIV/AIDS. Other NGOs focus on issues such as improving the sanitation system, providing medical care to “rag pickers,” organizing pre-school classes, or operating a mobile clinic for skin diseases.

As already mentioned, CORO is a social activist organization that has linked with RISHTA in its efforts to promote health and social reform. Aside from conducting street

plays on male sexual health problems, CORO leads projects promoting literacy, AIDS awareness, adolescent sex education and nutrition. It has seven branches that operate in different slums of Mumbai, including the study community. CORO helped establish a women's network through "mahila mandals"—neighborhood groups of women who pool their resources to implement projects to improve or educate the community.

Furthermore, CORO played an instrumental role in founding a Credit Cooperative Society to provide loans to women who want to start small businesses.

The Credit Cooperative Society has been quite successful in promoting women's interests, but the mahila mandals struggle to make a significant impact in the community. According to some women, the mahila mandals are not effective in helping members, mostly due to lack of funds. Trust in the mahila mandals has dissipated since rumors circulated about one woman who ran away with all of the money collected by the mandal (Sharma 2003).

C. Health Care System and Resources in the Community

The range of health care services available in the study community represents a microcosm of India's broad and diverse health care system. While the divide between allopathic and non-allopathic medicine has narrowed, the distinction between public and private medical care remains firm. The public sector, under government control, operates under certain norms on paper but fails to enforce them. On the other hand, the private sector completely lacks any system of professional monitoring.

Public health care services

Dr. Usha Ram, a faculty member at the IIPS who studies alternative medicine in India, spoke frankly about the vulnerabilities of the health care system. The government sets standards for patient and provider ratios, sizes of hospitals appropriate for a certain population density and quotas for medical supplies. However, none of these requirements are fulfilled because the public sector is not able to purchase materials from the free market (Ram interview 2004). The paucity of resources available in the public sector is evident from the conditions and supplies of the facilities that serve the poorest people of the study community.

1. Shitabdi Hospital

The government requires one allopathic hospital per administrative district; for the study community, the hospital is Shitabdi. It is a ten-minute autorickshaw drive from the center of the community. Shitabdi Hospital is outwardly an impressive three-story cement structure. Inside, however, the 210-bed hospital offers little more than intravenous lines, orthopedic casts and an ECG machine.

The hospital is divided into numerous wards and outpatient clinics, some much busier than others. All the wards at Shitabdi are “open,” meaning that there are no private rooms for individual patients. Rows of simple beds fill the large, high-ceiling rooms cooled by ceiling fans and open windows. On the day of my visit, about 47 percent of the hospital’s beds were occupied. The Medical ward was staffed by two nurses, as were most of the other wards such as Orthopedics. The Surgery and Post-Operative wards were empty since surgeries ceased at Shitabdi several months ago due to the lack of staff surgeons.

The Medical Intensive Care Unit (MICU), holding about ten beds separated by curtains, is the only air-conditioned patient room in the hospital. Computer monitors are propped next to each bedside but remain off, raising questions that could not be asked by visitors or answered by the tour guide. While patients on the ward occasionally had intravenous solutions at their bedside, almost every patient in the MICU had both an IV bag and a urine catheter.

Aside from the inpatient services, Shitabdi Hospital has departments common to every hospital. A standard laboratory reports results from all inpatients by 1 PM every day. The radiology department has only simple Xray machinery. According to the radiologist working on the day of my visit, there are 10 Magnetic Resonance Imaging (MRI) machines and no more than 3 CT scanners in all of Mumbai. The Emergency Room consists of an area for simple sutures and wound care. Perhaps the busiest area of the hospital was the Pharmacy with lines of people who had registered for 10 rupees to receive free medication for 10 days.

Another department with a great demand for service is the Outpatient Antenatal Clinic. Women were seated on the ground, in line two hours before the clinic opened that afternoon. The Gynecology Outpatient Department where the Antenatal Clinic is held is one of the newer, more modern areas of the hospital. With large, spacious white-tiled rooms, the Department had one examination table equipped with stirrups to perform pelvic exams. About 80 percent of the women who deliver at Shitabdi have attended the Antenatal Clinic at least once; all are tested for syphilis and HIV only.

The Labor and Delivery quarters of the hospital has one delivery room with 5 to 6 beds, as well as a pre and post delivery area. There are no fetal monitors and no

ultrasound machines - just the OBGYN and his stethoscope. Cesarean sections are performed on a daily basis, the only surgery taking place in the hospital's Operating Theaters.

Despite the lack of advanced equipment, most women in the study community deliver their babies at Shitabdi, if at any hospital at all. According to the one OBGYN physician temporarily staffing the Department, a full range of conditions can be treated at the hospital with the limited equipment he has available. In the 20 days that he has worked at Shitabdi, he has delivered about 75 babies. He estimated that about 30 percent of the deliveries were Cesarean sections. Pre-eclampsia and other high-risk pregnancies are fairly common, but only more complicated cases are referred to the larger government medical center 30 minutes away in Sion.

While deliveries may be accomplished successfully at Shitabdi, they come with the cost of discomfort. The OBGYN stated that delivering mothers must pay extra money for anesthesia because an anesthesiologist is not staffed by the hospital and must be called in from outside. Furthermore, the anesthesiologist is not available after midnight, leaving all mothers who deliver overnight at the mercy of painful labor.

Finally, the hospital participates in public health efforts through its Tuberculosis and HIV Departments. The Direct Observed Therapy (DOTS) program has an office on the ground floor of the hospital where patients come in to take prophylactic Tuberculosis medication for six months. If they fail to show up for an appointment, a community health visitor (CHV) goes to the patient's home to administer the medication. The HIV Department counsels and tests patients for the disease. The primary counselor is a young, motivated woman with a Masters in Psychology who states that she counsels about 100

patients each week, 30 of them prenatal women. She obtains consent for the HIV test and delivers the results to the patients. She estimates that about 10 percent of Shitabdi's outpatient population is HIV positive and about 5 to 6 percent of pregnant women are infected.

2. Urban Health Center

The Urban Health Center provides a level of care one step lower than Shitabdi Hospital in the public health care system. It is a one-story building in the study community and it serves the three urban communities that surround it. Professors and medical residents from the Department of Preventive and Social Medicine at Nair Medical College are the staff physicians for the Center.

Each day, the Center serves approximately 300 patients. The highest patient volume is during the morning hours (9:30 AM to 12:30 PM) when the Center holds its general outpatient clinic. The afternoons (1:30 to 4:30) are allocated for specific primary care clinics, such as antenatal and pediatric services. The Center has a laboratory that can perform basic blood tests, such as blood type and hemoglobin.

There are essentially two rooms within the clinic designated for physician and patient encounters. In the corner of each room is one examination table, surrounded by a curtain to create a sense of privacy. However, the majority of patients are seen in rapid sequence beside the physician's desk with a line of patients watching from behind. The Center addresses walk-in problems, summarized on a slip of paper by the medical intern which is handed to the physician when it is the patient's turn. The physical exam usually consists of a quick listen with the stethoscope and palpation of the belly. The physician requests tests and prescribes medications on the slip of paper and dismisses the patient to

fulfill the written orders in the laboratory down the hall. The prescriptions are filled by one of the dozens of pharmacies on the street.

Antenatal clinics are the only services that the Center offers that specifically cater to women. A gynecology clinic was held once a week at the Center until one year ago when the gynecologist left to accept another position. Since then, there have been no efforts from higher government officials towards finding a replacement. Therefore, women have no choice but to raise their gynecological health concerns at either the general outpatient clinic or antenatal clinics.

The rapid pace of the antenatal clinics, however, leaves little time to address issues unrelated to pregnancy. Tuesday afternoons are allocated for new antenatal patients while Friday afternoons are for follow-up patients, both of which are very busy. Each woman goes through the same series as she completes her clinic encounter. She begins with registering for 10 rupees which covers the cost of services for as many visits as she makes over the next 15 days. A medical intern then records her vital signs and medical history. A medical resident performs a physical exam on every new patient, but the exam does not include a vaginal exam if an OBGYN is not present. Lab work, immunizations and medications are ordered and the woman completes her clinic visit with mandatory counseling from the Center's social worker.

Most antenatal patients present for their first appointment when they have already entered the second trimester of their pregnancy. Although most women cannot give an accurate date of their last menstrual period, the gestational age of the fetus is estimated based on the size of the woman's uterus. Every woman receives an ultrasound at 18 to 20

weeks gestational age and every woman will be tested for syphilis. Both procedures are performed off-site and reported back to the Center.

Deliveries rarely occur at the Center and only during urgent circumstances. The Antenatal Clinic encourages all women to register with a hospital when they are seven months pregnant so that the hospital has a record of the woman's history available when she arrives for delivery. Most women attending the Urban Health Center's Antenatal Clinic register at Shitabdi Hospital.

3. Government Health Post

The last category of public health facilities in the study community is the government health post. The principal responsibility of the health post is to serve as the coordinating center for local public health campaigns. Recently, the health posts have been engaged in family planning, malaria control, observed therapy for tuberculosis and pulse-polio immunization. As a two or three room office, the health posts provide only a limited number of clinical services.

There are two health posts assigned to the study community. The larger health post is located within the Urban Health Center and serves the three surrounding communities. A smaller health post is located within the study community and provides services only for its community. A full-time medical officer (FTMO) manages each health post and works as the primary care physician during the clinic sessions. The FTMO directs a team of public health nurses, midwives and about 20 community health visitors (CHVs). An Executive Health Officer oversees all 97 health posts throughout Mumbai and the Health Minister of Maharashtra supervises the work of the Executive Officers (Khan interview 2004).

The CHVs complete the field work for the local public health campaigns initiated by the Executive Officers. Once a new campaign has been announced, the CHVs attend a training course on the particular public health issue. Their responsibility is to then distribute “Information, Education and Counseling” (IEC) materials to each household in the community. They inform the study community about special clinics – or “health camps” – held several times a week at the health post and often escort patients to the health clinic.

Even when there is not an active campaign, the CHVs must visit each household in their designated area at least once a day. Most CHVs are responsible for 60 to 80 households. Visiting each of these homes daily seems like an impossible task, but the FTMOs insist that their CHVs are able to complete their responsibilities. The CHVs live in the community where they work and are paid for the hours they work, from 9 AM to 1 PM.

While the tasks assigned to CHVs are usually manageable, some targets set by government officers are “unrealistic.” According to Mrs. Reshma Khan, a public health nurse stationed at the Urban Health Center post, the latest government campaign to promote vasectomies requires each CHV to recruit two men to agree to a vasectomy every two weeks. She stated, “This is an unrealistic target amongst the uneducated people.” However, the pressure to perform is strong, since failure to meet the numerical target jeopardizes her job as well as those below her (Khan interview 2004).

All the CHVs of the Urban Health Center and the study community health posts are female, which works against the success of campaigns for men’s health problems but works in favor of promoting women’s health issues. The morning hours of the CHV

visits usually captures women while they are at home. The frequency of the visits and the fact that the CHVs live in the neighborhood allow very close relations to develop between the CHVs and the women in the community. According to Dr. Sharmistha Lokhande of the study community Health post, the women in the study community are very honest and frank with the CHVs about their health concerns, often wanting to share intimate concerns with them before sharing with the doctors. Yet, the CHVs are limited by what they may do with the information offered to them. For example, women may complain to CHVs about vaginal discharge or other gynecological complaints, but the CHVs know that there is not a gynecologist at the Urban Health Center who can address their problems. The CHVs tell the women to visit the Gynecology Clinic at Shitabdi Hospital, but they know that many women can not afford the trip due to lack of mobility, time or money (Khan interview 2004).

In recent years, the health posts have made transient efforts towards addressing women's gynecological health. Sporadic health campaigns on STIs raised women's awareness about symptoms. Special clinics held twice a year have examined and treated more than 100 symptomatic women over the course of two weeks. Without the special clinics, all gynecological procedures, aside from IUD insertions, must be referred to specialists who work at government clinics or hospitals farther away. Again, the trip to get there may cost more than women are willing to spend (Khan interview 2004).

Sexual education

The education of adolescent women in the study community about sexuality and their reproductive health system has also been sporadic, at best. Two years ago, the health posts that serve the study community and the neighboring slums organized a health

education course specifically for girls. This was in response to the perception that boys had more sexual knowledge than girls because they discussed it more often in school and with friends. Also, boys were often inadvertently exposed to video parlors and pornography which raised their curiosity about the topic. On the other hand, girls were sheltered from the subject because parents felt that “their child will get spoiled by this information” (Lokhande interview 2004).

Parents were initially very resistant to the idea of their daughters’ attending the health education classes. The course curriculum included human anatomy, puberty, the reproductive system, family planning, family life, HIV and AIDS. Despite the range of topics, parents were fixated on the idea that the class would discuss “something dirty” (Khan interview 2004). They felt more comfortable with their daughters waiting to learn about sex at the time of their marriage. Mrs. Khan, a public health nurse at the Urban Health Center, stated that it was a difficult task to convince parents, “It is not just sex education; it is health education” (Khan interview 2004).

After repeated visits to speak with the parents of adolescents, the health post CHVs were able to gather a sizable number of girls to attend the classes. Sometimes, the girls’ mothers or brothers would attend the classes with them. In the end, the classes were well-received. “The girls themselves were very responsible,” said Dr. Lokhande. “They were keen to know about such problems.” Despite the apparent success of the course, the momentum to continue it has disappeared. Dr. Lokhande stated that it has been two years since the last course was offered, leaving girls in the community in a state of ignorance and potential fear of their womanhood (Lokhande interview 2004).

Private health care services

The great advantage of the public health care system for the poorer classes of people is that all services are free. Despite this economic break, people living in the study community overwhelmingly prefer private health care providers. Approximately 80 percent of women utilize the private health care system for their own health (Schensul 2003). For the poor population of the study community, the interaction with the private sector is usually limited to individual providers since private hospital fees are often beyond their means.

Dr. Ram explained that the preference for private providers was based on the notion that the quality of services at government facilities was worse than that at private offices. “Anybody who has a little bit of respect would not go there,” Dr. Ram said of government health centers. Many people feel that government health care providers treat patients poorly, refusing to explain their medical condition and disrespecting them. People also have the “perception that the wait to be seen is longer in the government sector, but, in actuality, it may be no different from the private sector” (Ram interview 2004).

D. AYUSH Providers

While the public health sector is based on allopathic medicine, the private sector is dominated by the traditional medical systems of India. More than 90 percent of the private providers in the study community practice Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy (AYUSH) medical traditions. In fact, ayurveda, unani and homeopathy are the most common disciplines in the study community.

Ayurveda means “science of life” in Sanskrit and ayurvedic medicine is from the ancient Indian vedic tradition. Ayurveda sees the human body as a microcosm of the universe containing 5 elements: earth/solidity; water/fluidity; fire/heat; air/movement; ether/space. The human body and organs are also composed of 3 humors (air, bile and phlegm) and 7 “dhatus.” One of the 7 dhatus is “sukra” which affects the formation and cycle of sperm and ova. “When sukra is disturbed, it results in reproductive and sexual health problems, in the same way any disturbance in the equilibrium of the elements, humors and dhatus results in disease” (Mekki-Berrada 2004).

Treatment in the ayurvedic tradition is aimed at maintaining or restoring the equilibrium. With an emphasis on prevention, treatment is focused on “avoiding causative factors such as risky behaviors, unbalanced diet and excessive regimens.” Holistic in its approach to establishing health, ayurveda attempts to balance the body, mind and emotions as well as the social, moral and spiritual elements (Mekki-Berrada 2004).

Unani medicine, although stemming from Greco-Hellenic and Islamic traditions, also views health as a state of equilibrium or balance within each individual. According to unani medicine, the human body is composed of basic elements (earth, air, water, fire), temperaments and qualities (cold, hot, wet, dry), humors (blood, phlegm, yellow bile, black bile) and forces (natural, vital, psychic). Unani treatment is different from ayurvedic in that it follows the principle of “contraria contrariis,” which means “to treat a disease by its opposite.” For example, a “hot” disease may be cured with a “cold” medicine (Mekki-Berrada 2004).

Finally, homeopathy is derived from the Greek words “homois” and “pathos” meaning “similar” and “disease/suffering,” respectively. This system of medicine was developed in Germany and has been practiced in India since the 19th century. According to homeopathy, the human body has an innate vital force that is weakened by “miasm” or pollution, resulting in disease. Exactly opposite of unani in its approach to healing, homeopathy adheres to the principle of “similia similibus,” or “like are cured by like.” Therefore, a symptom may be cured by the minimum dose of a substance similar to it with the goal of stimulating the vital force or defense mechanisms of the body. Like ayurveda and unani, homeopathy is a holistic approach to medicine that includes physical and mental factors, environment and diet in its definition of health (Mekki-Berrada 2004).

The education and training of traditional healers has evolved over time. Originally, Ayurvedic healers (vaidyas), unani providers (hakims) and homeopaths were schooled individually as apprentices of seasoned practitioners. In this way, they were trained as “purists” of the medical tradition. However, in the 19th century, medical associations and colleges in India began teaching both allopathic and traditional medical systems. Many medical students therefore became “professionalized integrationists,” or vaidyas and hakims who practiced both allopathic and non-allopathic medicine (Mekki-Berrada 2004).

The Ministry of Health and Family Welfare has officially recognized graduates of the “integrated” medical programs since the 1950s. These practitioners of multiple medical systems use zadi buti medications from the ayurvedic tradition as well as antibiotics from the allopathic. In recent years, however, the surging demand on medical

services has made it a challenge to keep up holistic practices and more and more “integrationist” practitioners are falling into the allopathic mode of medicine (Mekki-Berrada 2004).

Enforcement of AYUSH education and licensing regulations is poor, at best. With over 400 AYUSH medical colleges in India, only a fraction of AYUSH providers have graduated from official training programs. Dr. Ram describes how most of the providers learn by “trial and error.” From the provider’s perspective, “Since training is not a precondition to practice, why waste my time?” (Ram interview 2004) The result is that many modern day providers practice a mixture of medical disciplines without the proper training and potentially place their patients at risk of poor health care management.

Private providers in the study community

There are 44 private provider offices in the study community. Only 1 provider is trained in allopathic medicine and holds an “MBBS” degree. The other providers have backgrounds in AYUSH medical traditions, although their qualifications have not been documented. There are reportedly 14 homeopaths, 18 ayurvedics, and 11 unani practitioners in the study community (Schensul personal communication). With only a small number of female providers, the community is largely dependent on a male population of private AYUSH practitioners. In all three study communities involved in the RISHTA project, about 19 percent of allopathic providers, 14 percent of homeopaths and 6 percent of ayurvedics are female (Schensul 2003).

As observed in one community similar to the study community, private providers operate booming businesses with a nearly constant flow of patients at their doorsteps.

Charging between 20 and 30 rupees per case, the private providers report that they treat between 40 and 60, and sometimes up to 80 patients per day. The providers state that the majority of their patients are children. Male providers report that at least 40 percent of their patients are women, while female providers see a much larger proportion of, if not all, women.

Private providers address a full range of clinical presentations, from high blood pressure to persistent cough to chronic headaches. Based on direct observation, the majority of presentations are not urgent or life-threatening. But, in the case of an emergency, such as a woman “with the worst headache of her life,” the provider acts upon the possibility that she has a brain aneurysm and is able to call an ambulance to drive the woman to a tertiary care center. Private providers may refer patients to public or private facilities, but the patient’s ability to pay for private hospital fees is taken into account.

Most private providers keep relatively simple and modest quarters. Private offices have one or two rooms with an attendant who greets patients and manages the waiting area, a small area with a few benches or chairs by the street entrance. Patients are seen one at a time in a semi-private fashion. Although one examination table rests against the wall in the patient examination room, most patients receive a cursory physical exam while seated beside the provider’s desk. Patient encounters usually last less than 10 minutes and result in a written prescription to be filled at any pharmacy, sometimes even the one operated by the same provider’s office. No medical charts or records are documented for the patients, and providers rely on their own memory to recall the medical history of each patient.

The patients usually do not know the medical background of their private provider. They do not inquire if the provider has any formal training or a license to practice. Regardless of their qualifications, “Everyone is called doctor,” Dr. Ram said. From the outside, all the offices look the same with a sign board marked by a cross symbolizing medical services. Since providers mix all the different medical traditions in their practice, patients may be misled about their disciplinary background.

In the eyes of the patients, private providers are what they prescribe. Practitioners without any allopathic training will prescribe “Western” or “English” medications such as tablets or injections, leading the patients to believe that they are allopathic providers. These same providers will also advise their patients to adjust their diets or drink powder formulas, which are more in line with AYUSH practices. The dangers of such large numbers of patients being treated by providers who lack proper training frighten Dr. Ram. “Most don’t use patent medications, so we have no idea what they put in them ... The have no accountability if there are bad side effects, or if the medication makes the patient worse” (Ram interview 2004).

Regardless of their medical background, most private providers engage in only limited physical exams of their patients. This is particularly true if the scenario is a male provider with a female patient. Male providers state that their female patients openly share their health concerns with them, including sensitive issues such as gynecological symptoms. However, anecdotal evidence suggests that male providers almost never perform a pelvic exam. In contrast, female providers are more likely to conduct a pelvic exam on a patient with a gynecological complaint but not in every case.

In summary, the female population in the study community is relatively young but poor, living in an environment that presents numerous risks to their physical and emotional health. Advocates for women's health lack power and influence in the community. Attempts at educating young women about sexual health have floundered. Women seeking attention for gynecological health problems prefer private practitioners but are limited to choosing among mostly male, AYUSH providers who lack the facilities or training to conduct a pelvic exam and adequately assess their symptoms. With no other affordable options, women continue to visit these providers, often unaware of better standards of care. These patterns of practice have strong implications for the quality of care that women in the community receive and affect their daily lives.

Chapter 6

In Their Own Words: The Context of Gynecological Health

Women's expressions of health reveal that many different facets of their lives influence their physical and mental well-being. Most women juggle numerous responsibilities in the household, fulfilling multiple roles as wife, mother and daughter-in-law. In poor communities, women are keenly aware of the financial constraints placed upon them and their families. As a result, when speaking about their health problems, women mention them in the context of their environment, resources and consequences on their daily lives.

The in-depth interviews of 66 women from the 3 communities, including the study community, provide a rich sample of data about women's perspectives on their daily lives. Quantitative data from 90 FBSIs conducted in the study community supplements the qualitative data. Together, the two primary sources of information paint a complex picture of health in the context of life for women in the community.

A. The Routine of Daily Life

Any discussion of women's perception of their own health must begin with a portrayal of their daily lives. For the most part, women in the study community work long, hard days, beginning before sunrise and ending well after sunset. Most of their day revolves around household duties and family responsibilities, with a few hours of respite between tasks. The following is one woman's description of her typical day, and it is a fair representation for many women in the community, albeit with some variation.

Every day I get up around 6 AM. Since the toilet is not in the house at home, we use the public toilet...After coming from there, I take bath and cook food. We don't have the water tap at home. So when I cook food, my husband and brother-in-law fetch water from the nearby tube well. Then I give food to my husband as well as brother-in-law. Around 7:00 AM, my brother-in-law goes to work. My husband goes to work at 9:30 AM. Sometimes he takes food with him. After my husband left for the work, I wake up my children, help them getting ready, give them some food to eat, then I ask them to study. After doing all these, I start my daily routine household work. I clean all the utensils, clean the house, mop the floor, and wash clothes. Then, by 11:00 AM I am free. Around 12:30 PM my daughter goes to the school. The school is nearby. Then at 1:45 PM, I go to drop my son to the school...I come back home by 2:30 PM. Then, I don't go anywhere. I try to take rest...Then at 4:45 PM, I go to bring my son from the school. While coming back from the school, I bring the vegetables for dinner and next day's lunch. I reach home around 5:30 to 6:00 PM. Then I prepare the tea. Around 6:30 PM my daughter goes to the tuition class. One lady takes her along with her daughter, and I go around 8:30 PM to bring them back from the tuition class. When my daughter is in the tuition class, I cook food for the dinner. In between, I ask my son to study...Around 7:30 to 8:00 PM, my brother-in-law comes back from work, and my husband comes back around 9:00 PM. When he comes back, we take dinner. After that I clean all the utensils and clean the area where we ate. If I don't clean the utensils, then in the morning it becomes difficult for me to clean and cook. By 9:30 to 10:00 PM I finish all this work and then watch some programs in the television and go to sleep around 10:30 PM.

While much of the woman's day revolves around childcare, other women with older children describe their day in which children play a less prominent role. The following example illustrates this difference and also highlights the importance of religion in the daily routine.

I get up at 6:00 AM and I fill up water. After filling water, I go for bath, and then I make tea for all. Meanwhile, I knead the flour for chapattis, prepare the breakfast and serve breakfast to my children. Then I soak clothes for washing. After washing clothes, I wash vessels and swab the floor. I forgot to tell you that everyday after swabbing, I lit diya (lamp) in front of God. Sometimes, my husband also does this. Then it is time for me to prepare lunch. At 2:00 PM, I eat lunch. The whole day work is tiring, for relaxation I either sleep for sometime or clean wheat or I do stitching. At 5:30 PM, I make tea, and then prepare dinner. Since my husband is working in one of the transport companies, he comes home very late in the night, around 12:30 AM. I wait for him, after he finishes his dinner, we go to bed. My children are grown up, I don't have to worry about them.

The minority of women who contribute to the household income lead even more hectic schedules in which they maximize their use of the slower hours of the afternoon. One woman explained how she was a teacher before she had her children, but she quit her job because it was too difficult manage it as well as the household. However, as she described below, she has found a way apply her skills and earn some income while still fulfilling her other responsibilities.

I am 25 years old Muslim lady...My native place is Mumbai...I am married since last 9 years. My husband is 30 years old. I have 3 children, 1 daughter and 2 sons. Daughter is 6 years old and sons are 4 years old and 7 months old. I live in a joint family. My brother-in-law, sister-in-law, her 4 children stay with us. We have a semi-pucca (developed) house and it has 2 rooms. Every morning I get up around 6:30 to 7:00 AM. That is the time to take care of my children. Since they are young and small, I have to take care of them. Around 11 AM, I prepare the breakfast. By that time my husband comes back from work. He sells water in [the community]...Everyday he earns around Rs. 50 to 60, so that monthly it comes around Rs. 1800 to 2000. But it is quite less for us to survive and manage the household...Then around 11:30 AM my children go to school. I drop them at school. After coming back from school I cook lunch, and around 3:00 PM my husband comes back from work. Then we eat food together...After lunch, I clean the house and do the household work, which I have not done in the morning... I also take tuition classes. Two children come to my house for tuition. They are in fifth standard. I teach them from 6:00 PM to 8:00 PM... After the tuition, I cook the dinner. If my husband is at home, then we eat food. Otherwise I wait for him. But every day I go to my friend's house around 9:30 PM to watch the TV serial...After watching the TV serial, I come back home and clean the utensils, make everything neat and clean for the next day morning. Then, around 11:00 PM I go to sleep.

Women who generate income are keenly aware of family finances and keep track of their earnings as well as the needs of the household. The following woman finds a way to generate extra income, although on an irregular and unpredictable basis.

At 12 noon I go with my daughter to leave her in the school. At 3 in the afternoon I take lunch for her. After coming back home, I take rest for sometime or do my household work like washing vessels and clothes or watch TV. Whenever I get work from outside I do that in the afternoon. One of my neighbor takes order of stitching tiklis (beads). If we could finish one small packet, we get Rs. 10. Sometimes I earn this way.

Women whose husbands fail to earn enough money to sustain the household have an extra burden placed upon them, often with no choice but to work both inside and outside the home. One woman describes how she juggles both responsibilities, and how her husband's alcoholism and unemployment affects her lifestyle. Her words poignantly portray the lack of social support in her life and the estrangement from her in-laws.

I get up at 6 in the morning, wash my face. By the time I finish morning chores it is 7 AM. I am working as housemaid in 4 houses. In one house at 7 in the morning, wash vessels and clothes. This takes more than 1 hour. I reach home at 8:30, make tea for all, then prepare breakfast. After this gets over I sweep the house and clean. At 11 I go to one more house then continuously work at 3 places till 1 in the afternoon. Come back from work and cook lunch for all. Fortunately my work place is walking distance from my house. We are 7 members at home, myself, husband, 4 children, my mother-in-law and brother-in-law. I am taking care of all expenses. My husband is not working, He is an alcoholic, recently started smoking...Whenever I ask him he says that he is not interested in working, does not want to work. He drinks everyday, I should give him the money or he asks his friend...My brother-in-law is working, I do not know where exactly. He does not eat at home and he manages his expenses. My mother-in-law does not help me in household work, she goes to friend's house or gossips. My children are studying...I can't afford to pay their fees out of what I am earning. After working in 4 places in 1 month, I get Rs. 1700. It is not enough to run the house. My husband knows but he does not bother.

The fate that is passed in from mother to daughter often begins within the family's home, as young girls are expected to contribute to household chores. The role of the daughter in the household is valuable to her mother, just as it is valuable to her future husband and in-laws. The daily life of women in the study community is therefore recycled from one generation to the next, often with little opportunity for advancement. The following words of one mother are most certainly to be echoed in the future by her daughter.

When my daughter was not married she used to help me a lot in household work. Recently she got married. I miss her a lot. She was a great help to me. Now I have to manage everything alone. My husband and my son do not help me. The entire burden of housework is on my shoulders.

B. Domestic Relationships

Social and familial relationships are significant factors in the emotional health of women and consequently influence their overall state of well-being. The husband's family is often a considerable source of stress and abuse for women in the community. Many women live in a "joint-family" situation, sharing a home with their in-laws who sometimes wield full control over household finances and activities. A full 50 percent of women interviewed by the FBSI reported that their relationship with in-laws causes emotional distress, most notably worry, sadness and anger.

Most women wish to live separately from their in-laws, or at least to have their husband's support when in-laws argue or demand too much from them. As these women stated:

Soon after marriage I could feel that my mother-in-law's expectations were too high. Basically she was looking for someone who could work in the fields, and I was not used to all this. Because of this reason our relationship was strained. My husband never interfered, he told me that I should adjust myself and we can't expect mother to change in the old age. There were arguments but I had to cope.

My mother-in-law plays a major role at home. She is the head of the household. My husband gives her money to run the house, when I go to the market I have to tell her what I am buying and according to the approximate cost she gives me money. If anything is left, I give it back to her. My husband does not tolerate if anybody says anything to his mother. He is attached to her. Every evening when he comes back from work, he should see his mother around otherwise he gets upset and anxious about her.

But the more significant relationship affecting women's happiness is that with her husband, a source of tension for 52 out of 90 women interviewed in the study

community. The predominant feeling was one of worry, followed by anger and sadness and fear.

Because of constant pressure on me from my husband for sexual satisfaction and argument with my sister-in-laws and mother-in-law I am under stress. I am not normal mentally.

Even I do not have any health problems so far, except I get over stressed due to my husband's behavior.

While the marital relationship may be a source of stress, women have fairly positive views of their relationship, especially in comparison with others. Two-thirds of women said that they feel very happy about their marital relationship. Another quarter said that they are at least somewhat happy and less than one quarter of the women felt at all sad or discouraged about their marital relationship. Nearly 95 percent of women felt that they are “better” at their marital relationship than most other people, and less than 15 percent felt that their relationship is very bad compared to others.

Women also perceive that they communicate with their husbands relatively well. In fact, more women believe that their husbands understand their moods better than they are able to understand their husbands' moods. Seventy six percent of women feel that their husbands “always” understand her moods as opposed to 63 percent who believe they always understand their husbands' moods.

Similarly, women believe that they communicate more openly with their husbands than vice-versa. More women (96 percent) share their feelings with their husbands than they believe their husbands share with them (86 percent). Similarly, more women (92 percent) “always” or “sometimes” talk about their problems, including health problems, as compared with their husbands (86 percent). In either case, however, the level of communication and sharing is reportedly high. Two women stated:

I and my husband talk to each other about various aspects of life such as family, children, money and sex openly. He is very understanding so I don't have any problem.

Yes, we talk and share everything. He knows about my pain during menstruation and also about the discharge. But he has no problems.

Despite this apparently high level of mutual communication and understanding, several women expressed feelings of emotional distance and discord with their husbands.

He is my husband just for namesake. He gives money to run the family, that's all. We both are not much bothered about each other.

We are not deprived of anything, but as husband and father his love and affection towards us is lacking. This is the main reason of my ill health.

I am suffering from ill health, means I have body ache, backache, lower abdominal pain and severe headache... the main reason of my problems to be specific is lack of love, lack of sexual satisfaction. I need love, but my husband doesn't make love to me... Actually, fights have become so common among us that I cannot specify any particular incident. Sometimes he beats me in front of my children. All such mental stress has given rise to various health problems.

Cultural traditions may create distance between women and other relatives living within the household. Cultural perceptions of female maturation and gynecological morbidity sometimes prohibit women from openly discussing health concerns. One woman described her feelings when she first got her period:

I was crying at that time, but after listening that it is not a disease, I got relief. But stomach pain was there. My leg was also paining that time. There is no celebration for this in our home. It should be kept secret from father and brother, that now girl is matured.

Another woman described her silence about symptoms during her pregnancy:

There was fluid discharge and my fear was nothing should go wrong with the child. I did not share with anybody at home.

Social isolation is an unfortunate reality for many women living in the study community. Almost one-third of the women stated that they have no “close friends.” The average number of close friends reported by women is 2, but they still lack social support in many important arenas of their lives. More than half of the women cannot rely on help from friends or neighbors for childcare or in times of sickness or emotional distress. Only 28 percent reported that they would have the support of friends or neighbors in the case of domestic violence. One female interviewer noted on the questionnaire:

She told me that she feels lonely and isolated. It is affecting her health.

Domestic abuse

Violent arguments and abuse cause emotional and physical trauma for a subset of women in the study community. 40 out of 90 women interviewed stated that they have had a “violent” argument with their husband within the past 6 months. While the majority of the arguments were limited to verbal abuse, 17 of these women reported incidents of slapping, punching or kicking. One woman described the severity of her injuries from an incident of domestic violence.

The doctors had no hopes of my survival. I had 65% burns on my body...My in-laws were scared. They were trying to pressurize me to hide the truth. My sister's husband and mother were there. My brother-in-law slapped him in the hospital, they were furious about the way he behaved with me. For one month I was in the hospital. After I came back it is once again the same. He did not change nor realized about the way he was behaving with me.

Although one argument is enough to cause long-lasting repercussions, repetitive or consistent arguments in the home cause cumulative damage. 23 of the 40 women reportedly engage in violent arguments “rarely,” meaning less than once a fortnight. 13 of the women have violent arguments at least once a week. In the words of one woman:

There was no peace of mind due to too much interference [by husband], even small things led to arguments and quarrels. He started abusing me, hitting me. Even I retaliated and abused him. It went to the extent of hitting each other.

The most common reasons for recent arguments were related to in-laws or financial matters. Sometimes, however, there is no rational reason for the fighting, as described in this chilling description that captures not only the extent of violent abuse, but also the many sources of stress and sense of helplessness that befall women in the community.

In spite of tiredness, I did everything. Even then he used to fight and abuse me. Slowly he started physical abuse. I used to scream and cry but he was not bothered, he never listened to me. He beat me with whatever he had in his hand, with slippers. I tolerated everything at the moment. I never reacted or questioned anything, but next day I asked him, why he beat me, showed him injuries next day morning. He told me that he does not know what he was doing. His behavior was normal. Whoever came to know about it, my neighbors and relatives, they felt that I am complaining about him for no fault. I adjusted and tolerated only to continue married relationship because I am not educated, I have two daughters, and I was concerned about their future.

C. Sexual Activity and Health

Women in the study community are at sexual risk not necessarily due to their own sexual behavior, but from that of their husbands. Only 1 woman out of 90 has ever had extramarital sex. In contrast, 23 percent of men responding to the MBSI have had extramarital penetrative sex.

Exposure to STIs is evident from the reported lack of condom use. According to preliminary results from the FBSI, only 10 of 90 women stated that their husband used a condom the last time they had sexual intercourse. Seventy eight of 90 women stated that their husband had not used a condom during the past 3 months.

The lack of condom use may be a reflection of women's lack of ability to assert protection for herself, or her fear of insulting her husband by implying that he is unfaithful or untrustworthy. Furthermore, women lack fundamental knowledge about the benefits of condom use. One quarter of the 90 women believe that condoms cannot protect against STIs. Nearly two-thirds of the women either did not know or thought it was incorrect that a condom should be worn during sex if she had an STI.

Perhaps it is the lack of knowledge about STIs that explains why women rarely associate their gynecological health problems with sexual activity. The following is a rare expression from a woman that has linked her health problem with that of her husband.

Without condoms I don't allow him to have sex with me. Because once he was suffering from severe itching in his genital area and was taking treatment for it. When he had sex with me, then I got the same problem. When I went to the doctor, she asked me the cause like my eating habits and sanitation. Then she came to the diagnosis that I had got the problem from my husband.

When in a comfortable, secure environment, women who talk about their sex lives are usually more positive about their experiences. Women describe how their husbands are tender, spending time on lovemaking, and accept their refusal to have sex when they are ill, menstruating, pregnant, or overburdened with work.

More than three-quarters of the 90 women from the study community are positively satisfied with their sexual relationship with their husband and feel that their sexual needs are being met. About 90 percent state that their sex life at least somewhat meets their expectations and about 88 percent state that they feel happy when they think about their sexual experiences.

At the same time, 20 percent of the women report a low interest in having sex. Two-thirds of the women report only a moderate interest and less than 7 percent report a high interest in sexual activity. Reasons for women's lack of sexual desire range from a lack of privacy to the husband's lack of effort in arousing them. One woman lamented:

The reason for refusal is, sex never begins with love, there is no loving conversation... He never appreciates, never expresses, but I always want verbal expression... All I want from him is love.

Other women described how they never had any interest in sex, even when they were newly married. For some women, sex is an unknown entity of married life. This makes the first sexual experience especially physically and emotionally difficult.

On the first night when my husband came and touched me, I couldn't understand what is happening. I started crying because I was not prepared for sex. There was nothing except intercourse. It was painful. I could not urinate for 2 days, then my husband went and brought medicine from the doctor.

One woman who was involved in even a love marriage stated that she did not know there was any physical relationship between a man and a woman in marriage.

I had no idea that there was any physical aspect to a relationship. Nobody told me. Slowly, I figured it out.

Her first sexual experience was not enjoyable, but it improved with time, as it does for many women involved in more positive sexual relationships.

However, for some women, the lack of interest or refusal to have sex begins on the wedding night and follows them well into marriage, leading to circumstances of forced sexual encounters that have their own repercussions on health. About 12 of the 90 women stated that their husbands physically force them to have sex even if they are not interested. The most common consequence of forced sex reported by the women is mental disturbance, although some also feel a stronger lack of sexual desire. Physical

symptoms include vaginal bleeding, vaginal pain and breast pain. As described by the following women:

That night (first night) when he touched me, I asked him what he is doing, why is he touching my body, and then I started crying. It was a forced sex. I was not prepared at all. My vagina was injured and it was bleeding. I went to the doctor, she prescribed some tablets and a gel and told me that there is nothing to worry, after marriage it happens to almost everybody.

There were arguments between my husband and me after marriage... [because] I was not interested in sex from the beginning.

After sometime I came back to my senses. I was crying. He explained to me that this happens with every girl. Again he did sex and I was unconscious for the second time. It was painful, continuously for one week I was unconscious when we had intercourse. I bled for two days just like menstruation, my back was paining.

The responses from women about their ability to refuse sex are contradictory. On the one hand, 50 of the 90 women strongly believe that they can refuse to have sex despite their husband's desires. On the other hand, 51 of these same 90 women strongly believe that it is their duty as a wife to have sex with their husband whenever he wants. Therefore, it appears that women in the study community do not have a clear sense of empowerment regarding sexual activity and in general lack the ability to assert themselves for their own protection.

E. Physical and Emotional Health

Daily responsibilities, domestic and sexual relationships and household dynamics are significant physical and emotional health factors for women. When asked to speak about their health problems, women naturally raise the issues of domestic work and emotional distress. Women living in poor environments are responsible for the majority of household work, and they speak about the physical demands of their responsibilities

taking a toll on their health. Between 50 and 80 percent of women in the study community receive no help from their husbands in cooking, doing laundry, washing utensils, cleaning the house or fetching water from the common tap (FBSI). Excessive or prolonged physical demands have affected the following women.

Since my childhood I am suffering from backache. My father took me to the doctor, he said there is nothing to worry, it is because of lifting heavy weight and routine household work. I get the pain only if I am overworking.

Whenever I overwork or wash clothes. I get rash. Then I take Combiflam, Crocin or Nise tablets.

Due to a lot of work sometimes my body pains.

The problem I am facing right now is backache. That too when I have much work. I have to lift the heavy buckets and other things by bending only and doing the work of eight children, itself is a tedious job. Other than this I have knee pain and stomach pain whenever I get my menses.

Health problems enter women's lives in association with physical or emotional sources of stress. Some speak of health problems in general terms, as a natural consequence of living in a hard, urban environment. One woman stated:

I have minor problems, which according to me every woman has, such as backache, weakness, leg pain and dizziness. I have backache when I stand for a longer time. My hemoglobin count is less, so I feel weak. And staying in such an area itself gives rise to many diseases. All round the year, some or the other disease spreads.

Preliminary results from the FBSIs show that the majority of women experience a significant amount of stress and tension in their daily lives. In the study community, 73 percent of the women responding to the FBSI stated that household matters such as family and money cause them tension "to a great extent" or "to some extent." Children, their education and future, cause a tangible degree of concern for 63 percent of the

women. Specifically, the daughter, her marriage and future, cause some or a great amount of concern for half of the women interviewed (FBSI).

Many women recognize the role that stress plays in causing or exacerbating their physical ailments.

My daughter running away with a man is a depressing and traumatic incident for me. It has led to many health problems because due to tension I skip meals, cry a lot and so on.

I get depressed, do not get sleep many a times, still facing everything. Due to constant stress I get exhausted mentally. I have no physical strength but have to survive.

As I have told you about my problems, there is one more thing because of which I am tensed. I get scared at times and my palpitation increases suddenly. Sometimes if I think more or talk more then suddenly I am faint.

God has not given me any disease. Doctor says due to deficiency of blood you are having weakness, dizziness. Another reason is tension.

Some women attribute physical symptoms to one particularly stressful period or incident in their lives. A woman who worried about trying to get pregnant described how she was feeling breast pain and suffering from white discharge at the same time.

During that time milky water was coming out, so I told my mother. She was also not able to understand it, she asked her friend but of no use. We all were tensed, why it is happening. I was not having child also, so why milky water is coming. Then we both went to Dr. X. He examined me and talked with my husband that do not give her tension for child. She is very much tensed and it's the result of the tension and stress.

Another woman spoke a neighbor's suicide.

Ten years back... somebody had committed suicide by hanging himself with fan. His house was near... therefore I also went to see that. After seeing him, I was not able to stand there. From that time I am always having headache and tension. If I will work for hours I feel weak and need rest. Therefore, my husband doesn't say anything to me and if I refuse sex, he agrees because he knows I am not feeling well.

F. Consequences of Health Problems

Aside from disturbing physical and mental well-being, health problems affecting women have far-reaching consequences on family life and security. Because of the many roles that women play – wife, mother, daughter-in-law, housekeeper, sometimes wage-earner – an episode of ill health can disrupt the balance within a family and household. About 21 percent of women surveyed stated that their most recent problem has had negative effects on their family life. The loss of a woman's productivity may be detrimental to the health of family members and the state of the household. Women recognize the impact of their health problems in the following statements.

During my pregnancy, I was walking on the road when a motor bike pushed me and I fell on the roadside. It affected my health so badly that I started getting fits (mirgi). And since then once in a month I do get such attacks. My whole family life suffers due to my problem.

If she wouldn't be there, then my other children had to fast for days, because I am not able to work due to health problems. If I talk more or think more then I become unconscious. In this state of mind I cannot work properly.

My major problem is headache because of which my life has got affected badly. Whenever I have headache I am not able to see anything, meaning vision is blurred and secondly not able to do any work.

For some women, symptoms of ill health have a profound effect on their personal life, interfering with their sex lives or the practice of their religion. In the words of one woman:

We have to be clean and pure while offering prayers and I used to have so much discharge that it made me feel dirty. So I stopped.

What women say about their health is one way of appreciating the place that it holds in the context of their daily lives. From their own words, it appears that women freely express complaints of physical and emotional pain and associate them with major

features of their lives. Their domestic responsibilities demand a full day of work, causing physical strain and exhaustion. In between household chores, women must balance the needs of their husband, children and in-laws. Conflicts within the household add to their burden of work-related stress. The marital relationship, carrying risks of physical violence, STIs or forced sex, upsets women's physical and emotional stability. If unattended to, women's health problems detract from their performance in their many roles and consequently alter the social fabric of the community.

Thus, health is one factor among many that interact and play critical roles in the lives of women in the community. Efforts to address women's health must consider all the elements that affect her physical and emotional state of being. Furthermore, physical health is related to emotional health and vice-versa, therefore requiring equal and due amount of attention to both. As will be seen, this holistic approach to health applies to gynecological morbidity which must be addressed and treated in the context of women's lives.

Chapter 7

Gynecological Morbidity in the Study Community

A. Prevalence of Perceived Gynecological Symptoms

Women in the study community reported a wide range of gynecological symptoms in the 3 months prior to the FBSI. As shown in Table 7.1, the 90 women responding to the FBSI reported a total of 29 different symptoms of varying prevalence and severity. Each woman has an average of 4.92 symptoms, with a range of 0 to 15. The most common number of symptoms per woman is 2.

Table 7.1 Prevalence, Severity and Treatment of Self-Reported Symptoms in Past Three Months

Symptom	Percentage (Frequency, n=90)	Severity Score*	Percentage (Frequency) who sought treatment
Headache	62.2 (56)	1.79	64.3 (36)
Lower backache	61.1 (55)	1.71	65.5 (36)
Pain in body	50.0 (45)	1.96	57.8 (26)
Pain or cramps during menses	44.4 (40)	2.36	25.0 (10)
Giddiness	38.9 (35)	2.11	51.4 (18)
Anxiety	27.8 (25)	1.77	4.0 (1)
Loss of appetite	27.8 (25)	2.16	64.0 (16)
Chest pain	26.7 (24)	2.21	50.0 (12)
Depression	25.6 (23)	2.00	0.0 (0)
Pain in lower abdomen	23.3 (21)	2.24	47.6 (10)
White discharge from vagina	23.3 (21)	1.86	52.4 (11)
Palpitations	22.2 (20)	2.35	45.0 (9)
Irregular menses	20.0 (18)	2.37	33.3 (6)
Swelling in ankles	13.3 (12)	2.58	33.3 (4)
Loss of sexual desire	7.8 (7)	2.43	0.0 (0)
Itching in and around vagina	6.7 (6)	2.83	33.3 (2)
Burning urination	5.6 (5)	2.20	60.0 (3)
Infertility	5.6 (5)	1.40	80.0 (4)
Pain in vagina	4.0 (4)	2.67	0.0 (0)
Swelling of glands in groin	4.4 (4)	2.80	50.0 (2)
Excessive bleeding from vagina	3.3 (3)	2.00	33.3 (1)
Pain during intercourse	3.3 (3)	2.67	0.0 (0)
Sexual dissatisfaction	3.3 (3)	2.00	0.0 (0)
Blood in urine	2.2 (2)	2.00	100.0 (2)
Pain while urinating	2.2 (2)	2.50	0.0 (0)
Dryness in vagina	1.1 (1)	3.00	0.0 (0)
Foul smelling discharge from vagina	1.1 (1)	2.00	0.0 (0)
Obstructed urine flow	1.1 (1)	2.00	0.0 (0)
Ulcers in and around vagina	1.1 (1)	2.00	100.0 (1)

1=Very Severe 2=Somewhat Severe 3=Not severe

Overall, lower backache and headache are the most prevalent symptoms, reported by at least 60 percent of the women interviewed in the study community. Generalized body pain and menstrual cramps were reported by nearly a majority of the women. More than one-third of the women experience giddiness or dizziness, and more than one-quarter of the women experience anxiety, loss of appetite, chest pain and depression. Nearly one-quarter of the women reported white vaginal discharge and lower abdominal pain. There were no reports of pus discharge from the vagina, infection of the uterus or genital prolapse.

Women generally found the most prevalent symptoms also to be the most severe. With the exception of infertility, all symptoms with a severity score less than 2 are amongst the most frequently reported symptoms. At least 40 percent of the women with lower backache or headache described the pain as “very severe” as opposed to “somewhat severe” or “not severe.” Less than 20 percent felt that the pain was not at all severe. Similarly, more than 80 percent of women with anxiety or generalized body pain described it as at least “somewhat severe.” About three-quarters of the women with white vaginal discharge felt that it was “somewhat severe” or “very severe.” More than two-thirds of the women described their giddiness or loss of appetite as at least “somewhat severe.”

Less frequent symptoms were reported in very low numbers, but nonetheless make valuable contributions to the current profile of perceived gynecological morbidity in the community. Although few women report symptoms of vaginal pain, itching, ulcers or foul discharge, the presence of these symptoms at all indicates that gynecological problems exist in the community. Women may be underreporting their symptoms and

the relatively small sample may contain bias that together creates a false impression of a low prevalence of gynecological disease. In fact, reports of any abnormal symptoms indicate that many more women may be suffering from similar symptoms. Thus, gynecological morbidity is an issue that affects this community.

Most of the less prevalent symptoms are not more than “somewhat severe.” However, although only 5 women reported infertility as a symptom, it is noteworthy that 4 of the 5 women described their experience as “very severe,” the highest proportion of “very severe” descriptions for any symptom. Perhaps it is the perception of severity that also led 4 out of the 5 women to seek treatment for infertility.

The correlation between seeking treatment and perceived severity is not consistent for all reported symptoms. The 3 women who reported blood in urine or vaginal ulcers all sought treatment. However, they all perceived their symptoms as only “somewhat severe.” Despite only moderate discomfort, the women may have been concerned enough to seek treatment because of the unusual or uncommon nature of their symptoms.

In general, however, women experiencing more severe common gynecological symptoms are more likely to seek treatment. For example, 87.5 percent of the women experiencing severe white discharge sought treatment, compared with 50 percent of women with somewhat severe symptoms and 0 percent of women with symptoms that were not severe. Similarly, of the women who did not seek treatment, 60 percent of the women were from the group that did not have severe symptoms; only 10 percent of those who did not seek treatment reported very severe symptoms.

Finally, women frequently sought treatment for the most common symptoms. At least 25 percent of the women experiencing the most common gynecological symptoms

sought treatment for them. The exceptions are depression, for which no women sought treatment, and anxiety. Nearly two-thirds of the women with headaches, lower back pain or loss of appetite were treated for their problems. At least 50 percent of women were treated for body pain, giddiness and chest pain. Approximately 52 percent of women with white discharge used at least one method of treatment.

Although the most prevalent symptoms are not straightforward gynecological complaints, they fall within a cluster of symptoms that are associated with gynecological morbidity. The self-reported symptoms of 173 women from 3 communities, including the study community, were sorted through SPSS Factor Analysis. Thirty-two symptoms that were reported by at least 5 women were categorized into 5 clusters of symptoms that presented frequently with each other (Table 7.2).

As can be seen, 9 of the 12 most frequently reported symptoms cluster together in the Factor Analysis as a group of general body complaints. Other community-based studies of gynecological morbidity have found women reporting these non-specific somatic symptoms together and have called the syndrome “kamjori,” described as “weakness” or “fatigue.” The syndrome may be a somatic expression of emotional health problems, such as depression or stress (Schensul 2003 citing Patel and Oomman 1999).

However, depression and anxiety fall into a separate cluster of “Mental health” symptoms that also includes loss of sexual of sexual desire. An association between these symptoms can be deduced, as any emotional distress would decrease interest in sexual activity. Excessive bleeding from the vagina may be hypothesized to be either a cause of sexual disinterest or, a few steps removed, a consequence of sexual disinterest leading to forced sex and traumatic injury.

White discharge is clustered together with other “Gyneco-uological” symptoms. This group of symptoms is localized to the pelvic region and includes vaginal as well as urinary complaints. As a cluster, these symptoms suggest an infectious process or abnormality with either or both the gynecological and urological structures.

Table 7.2 Factor Analysis of 32 Symptoms (reported by at least 5 women)

“Kamjori”	Gyneco-uological symptoms	Sexual discomfort
Backache	Obstructed urine flow	Swollen glands in the groin
Headache	Pain while urinating	Blood in urine
Giddiness	Burning urination	Swollen ankles
Body Pain	White vaginal discharge	Pain during intercourse
Loss of appetite	Vaginal dryness	Sexual dissatisfaction
Chest pain	Foul vaginal discharge	Pain in vagina
Palpitations		
Abdominal pain		
Irregular menses		
Menstrual pain/cramps		
Mental health	STI symptoms	
Excessive vaginal bleeding	Infertility	
Loss of sexual desire	Vaginal ulcers	
Depression	Vaginal itching	
Anxiety	Pus discharge from vagina	
	Infection of uterus	
	Mass coming out of vagina	

The manner in which these symptoms cluster together reflects how women associate them with each other. Women’s expressions of gynecological complaints are often in euphemistic terms that spare them the embarrassment of pronouncing problems with moral implications. However, this is not likely to be the case for women responding to the FBSI since the symptoms are read aloud to them and they respond with a “yes” or “no.” Women responding to the FBSI report symptoms in the clusters described above because they perceive them as being linked with one another, either through a common cause, a common effect or a cause and effect.

The previous chapters present numerous examples of women expressing how their physical health is associated with their emotional health, domestic environment and sexual activity. This may explain why certain symptoms reflecting long hours of physical work, such as swollen ankles, are clustered with more obvious gynecological specific symptoms reveals further hypotheses to explain the clustering of their health problems.

B. What Women Say About Gynecological Symptoms

Backache

As one of the most prevalent symptoms among women in the study community, backache is most often expressed in conjunction with other health problems, including gynecological symptoms. Several examples illustrate that women frequently mention backache in association with white discharge.

I remember that during pregnancy only I get this white discharge problem. With the problem also we used to have sex. I mean to see during pregnancy I used to get the problem of white discharge. Now back pain is also there. Doctor told me, it might be due to weakness.

I suffer from back pain and white discharge. It started during pregnancy of second child. It was there till last two years.

Backache associated with gynecological symptoms or sexual activity may be more difficult for women to address because of cultural inhibitions about discussing such topics. One woman stated:

After having physical relation, I always have backache. For this I have not gone to doctor. I feel shy to tell this to doctor.

Of course, some women describe pain back simply as a result of physical strain.

Since many years I have the problem of backache. So I take rest. If I don't take rest, I feel very uneasy.

Alternative treatments for back pain are frequently shared among women in the study community, as they are for many other health problems. The following statement is one example.

For my lower backache, my aunt suggested that I should eat dry fruit ladoos, as for ladies it is good for bones and backache.

Giddiness

Giddiness encompasses a constellation of symptoms that denotes weakness or dizziness. The term is best understood from the description provided by women experiencing the symptom.

After conceiving there was giddiness, didn't feel like eating anything, couldn't lift up the head, it continued for three months, couldn't stand, tolerate any aroma or smell, there was vomiting. I felt better after taking medicine.

While medications work for some women with giddiness, others try home remedies or modifications to their diet to stabilize what they perceive as a sign of emotional imbalance or deprivation.

Sometimes I get giddiness, I feel this when I am alone, when there is nobody to talk with me. One of my neighbors told me that I should drink lemon juice and buttermilk with salt. I am taking those everyday. It is giving me relief.

Dysmenorrhea

Pain and cramps during menstruation were reported by nearly half of the women interviewed in the study the study community and are described in most cases as being less than severe. Many women experience menstrual cramps as they just start to have their menses and they feel less pain as they grow older.

I had pain during menstruation, now I am not having it. It was there for two years when I got first menarche.

With menstruation, stomachache, chest pain, backache starts.

It was painful, my stomach and lower back used to pain. When I got for the second time, my mother told me that I have become an adult.

Some women continue to experience discomfort well into their adulthood and beyond their pregnancies, although few mention any form of treatment. The pain may not be consistent with every menses, thereby making it less of a concern for some women.

Yesterday I had stomach pain and dizziness that was also due to periods only.

During menses, I used to have some problems like backache, burning near the vaginal area and boils. But after my first child was born, I never had any problem like backache or body ache during menses.

Sometimes I get pain during periods, but it is very rare. I am having bleeding just for 3 days, so is it a problem?

Dysuria

Vaginal sores or ulcers can often lead to discomfort during urination, a classic sign of genital herpes. For example, one woman described her symptoms while using oral contraception, suggesting that she may have contracted an STI in the absence of any form of barrier protection.

Problems of burning sensation while urination, sores and itching over vagina, I also suffer from these problems when I was using contraceptive pills. I got sores and itching around vagina. For which I went to Dr. X. I had burning sensation also but it was treated by Dr. X.

While vaginal ulcers and itching appeared in the same Factor Analysis cluster of “STI symptoms,” dysuria was in a separate cluster of “Gyneco-urological” symptoms. However, women link burning urination with vaginal ulcers through a common cause.

The theory of excessive heat within the body applies to both vaginal ulcers and burning urination. One woman stated:

Sometimes I have burning sensation while urinating. That is due to heat whenever I am not drinking sufficient amount of chaaj (butter milk). Usually I take 8 to 10 glasses of buttermilk. When I was not able to drink it I get burning sensation. Due to lack of buttermilk, I have yellow urine also.

White Discharge

Women attribute white discharge to a variety of reasons, all of which stem from different medical traditions of India. As they speak about the origins of the discharge, they often mention symptoms that they associate with it, such as back pain, leg pain and weakness. The following women present white discharge as a direct consequence of a medical procedure, such as sterilization or IUD insertion.

I went for family planning operation. Immediately within a few days I started getting white discharge. I was going for check-up to X Hospital. They told me that there is nothing to worry because there was no change in the color. I used to get lower back pain and used to feel weak. My legs were also paining. The doctor told me that it is due to white discharge. This continued for 4 or 5 months. But now it is not there.

You know, since the birth of my son, I have got a loop (IUD) fitted. As a result, I have a lot of white discharge. My menses are also very heavy and sometimes I have pain in the back.

Six years ago I did sterilization and after one year I started getting white discharge. I think it's a side effect of sterilization. From the last 5 years I am suffering from white discharge. The discharge is thin but sticky.

Other women associate white discharge with abnormalities in their diet or temperature. This is a reflection of the ayurvedic medical tradition. Women most frequently mention rice and heat (“garmi”) as a source of their symptoms, although the treatment that they choose to follow may be from an entirely different medical tradition.

Some of the women's comments reflect this mixture of medical traditions in explaining multiple causes and cures for white discharge.

I used to eat a lot of raw uncooked rice as a child. That is why I am suffering now.

I used to get white discharge. It was because I used to eat raw rice a lot. For the treatment, I went to municipal hospital. After a few days, I got relief. There was no bad smell, it was sticky the way we get before menstruation. My elders told me that it was due to heat (garmi) in the body.

I had white discharge for a few days. It was thick and milky but no smell. I went to one of the lady doctors. She gave me a tablet to put into vagina. The treatment cured the problem. The reason for the white discharge is kamzori (weakness) in the body. I get this before I get menses. My back also pains. After getting menstruation I am all right.

I am also suffering from white discharge and have consulted doctor. Every time I go to the doctor, he says it's because of weakness. I have also taken some medicines for this. But those are not effective...I have already spent around 250 rupees on this problem and I am not satisfied with the treatment.

Other women also describe the extent of their suffering and their frustration with multiple trials at treatment for white discharge.

I have been having this problem for the last two years. There is a lot of white discharge, so much so that it soaks my clothes and I have to change my salwar at least 2 to 3 times a day...I have told my husband about it. He had taken me to a private doctor for English treatment. But it is very expensive. Just a check-up costs Rs.100-150. Plus he prescribed medicines which have to be bought from outside. I have tried Hakimi medicine also. But all relief is only temporary. I have spent a lot of money on getting this problem treated. But it hasn't helped cure it.

Most times, there is no smell. Sometimes it is thick, at other times thin, watery. Sometimes it is the color of milk and ropery. But the discharge is very heavy, my clothes get soaked and I need to wash myself often. Sometimes I change my clothes too.

There are a significant number of women who perceive that all women suffer from white discharge and consequently dismiss it from needing medical attention.

Neither consistency nor odor distinguishes whether or not these women perceive the discharge as normal or abnormal.

Sometimes it smells a lot and is very thick and sticky. At other times it is thin, watery and no smell. I have backache and feel kamjor (weak) because of it...No, I haven't seen a doctor. I think all women suffer from this. What is there to see a doctor?

Discharge is thick and white in color. For this I went to Dr. X who gave me tablets. I finished one strip of medicine and then didn't go to the doctor again. I thought it is common for woman therefore did not go for treatment.

For some time, I had white discharge but I never went to the doctor. I used to get backache and stomachache. It was thick white discharge without smell. Slowly it went on its own without any treatment.

According to one woman, her doctor reinforces the concept that white discharge is normal.

He'd only give medicines and say I would be all right and that it common among married women to have white discharge.

When asked directly why, then, women have white discharge, one woman responded:

I don't know why women have this problem. Maybe it is because of sex or the way a woman's body is! You tell me what the cause of this could be?

Interviewer: It could be infectious...Do you think you could have contracted some infection?

How would I know? But my husband has no problems.

Very few women express any appreciation of white discharge signaling an infectious process, or resulting from specific sexual activity. One woman made this rare extrapolation that links her symptoms with her husband's sexual behavior.

I had itching in vagina and also white discharge after two years when he came back home, leaving that beer bar girl. White discharge is lightly yellowish color. I took treatment for it and it's cured.

Some women, however, recognize a pattern of white discharge presenting in relation to their sexual activity, if not a consequence of it.

Yes, I have white discharge after the third delivery. My stomach used to pain a lot even if I lifted the weight. Sometimes I used to get white discharge after intercourse. There was no smell, neither it had any color. It was more like watery discharge, I used to feel weak. There was backache and itching.

Women who seek treatment for white discharge naturally perceive it to be either uncomfortable or abnormal. The following comments are from women who have ultimately found relief through treatment, although some have used treatment practices from multiple medical traditions.

I visited a doctor in the community...I went there twice. He gave me a few red color tablets. Those tablets gave me relief. Now I am all right. The doctor charged Rs. 35 per visit and also prescribed some other medicines, which I purchased from the chemist. There is another doctor... he used to advise to drink the water after washing rice. He says, this medication will cure white discharge forever.

I went to the lady doctor but it did not help. Then changed the doctor, Dr. X is a very good doctor here. During white discharge I used to feel feverish, my friends suggested that I should take Zeera (cumin seeds) and sugar mixed together in water and also used to drink stored in mud pot. This herbal treatment gave me little relief. Dr. X gave me injections, I felt better, but it was painful. I don't remember the name but it really helped me. You know why I used to feel weak, it is because discharge was continuous for 15 days, sometimes one month. But in 2-3 visits only I started getting relief, this problem was there for a long time but ultimately I got relief or cured. Now there is nothing.

While women may not perceive white discharge as normal, some may see it as one of many problems that come from a common source, such as emotional stress or poor living conditions.

I am suffering from white discharge when I was 12 years old. I took homeopathy medicine for 2 to 3 months, then stopped. Due to lack of money, I was not able to get treatment for it. It's a thick one and little smell is also there. With this, I have weakness and dizziness, back pain and vision is also not good...If I will get good food all this will go automatically.

Dyspareunia

Women who experience discomfort during sexual intercourse respond to the issue in different ways. Reflecting an ayurvedic philosophy, some women attribute their discomfort to an imbalance within the body. With this perspective, there is the possibility of rectifying the problem and having a fulfilling sexual life in the future. However, other women who have had painful intercourse see no hope of improving the situation and resign themselves to a life devoid of sexual enjoyment.

When I am staying with my mother, my husband visits my native place before I came back. We have sex and once again it gives burning sensation. Again I have to go to the doctor. He said that this problem is due to heat in the body, change of food habits and the desire to have sex after a long gap.

For near about 10 to 15 days I had pain during intercourse. After that it automatically stopped. Now rarely we have physical relation.

Interestingly, some women derive pleasure despite the pain of sexual intercourse, in a somewhat self-sacrificing effort to please their husband. Other women have the opposite reaction and lose all interest in sex because of their unpleasant experiences.

Yes, when he enters, it hurts but it is mixed feeling. You feel good too and he likes it, so you learn to enjoy it.

Actually I don't like to do sex because it's very painful for me. After every sexual intercourse, I get pain in my vagina. So, I really don't want to do sex.

Anhedonia

As mentioned above, some women fail to develop an interest in sex due to painful, unpleasant encounters. Other women may not have as clear of an explanation for their lack of desire, although they acknowledge that this is not how most women feel.

Whenever friends talk, they share their experience, they want to have sex quite often then I find myself different from others. I don't know why I don't feel. As such there are no gynecological problems for lack of desire.

Abnormal Bleeding

Women experiencing abnormal bleeding describe a variety of scenarios, most often consistent with prolonged, heavy bleeding at irregular intervals (menometrorrhagia). The following is a classic description of this symptom.

My periods were irregular even before marriage. I'd get it once in 2 months and could not predict when it would come. Then the flow is too heavy also or sometimes too little. I'd have bleeding for 5-7 days. That was because I got periods once in 2 months. Then there would be more bleeding, no?

One woman described a particularly severe case of abnormal vaginal bleeding that was eventually treated effectively with an allopathic regimen.

I started bleeding heavily and became unconscious. The teachers got some heavy, thick clothes and I used that as a pad. After that they called an auto rickshaw and sent me home. That time also the bleeding did not stop. So, I took the medicines, which I had taken earlier. However, I became very weak and I had to discontinue my studies. The periods continued for 8 days with a heavy bleeding...Since it was too heavy, I had to consult the doctor. The doctor gave me 2 medicines, CBP Gynaec and Progesterone. I continued that for one month, then my bleeding problem became all right.

When describing their doctor's assessment, women report weakness or anemia as a cause of their heavy bleeding. However, from their comments, it may seem more likely that the bleeding in fact is a cause instead of a result of weakness and anemia. Some women have undergone pelvic ultrasounds to rule out uterine fibroids as a cause of their bleeding.

Since last six years, I am getting menstruation twice a month. One day before Roza (fast) it started and again it started after 19 days. Bleeding is there for two days only. I never went to the doctor. For 2 to 3 years it is happening, bleeding was there for 15 to 20 days. I went to Kama Hospital, doctor said that it's due to weakness, so in a month I get twice. During that period I feel weak, do not know why? Nothing else is there... I am not taking it seriously due to other responsibilities.

From the beginning I bleed for nine days. Sometimes it is for fifteen days to one month. Elders took me to the doctor, I was given medicine, it was all right for few years. After the first delivery again it started but for the past one year it became worse. I am going for the treatment to Chembur. The doctor told me that it is due to anemia and also told me to take sonography. It has clearly shown that there is no problem in the uterus. Everything is normal. Doctor has prescribed tablets recently I started taking. I should be all right within few days.

Several women speak of alternative medical traditions for relieving the bleeding.

Some turn to these alternatives only after allopathic medicine has failed them. Others prefer non-allopathic medications from the very beginning.

I am also suffering from irregular menstruation. Sometimes I get once a month, sometimes twice or thrice a month with heavy bleeding. I went to the doctor but it did not help. Now I am going to Baba in the nearby locality, he does spiritual treatment. He is not giving me any medicine, he asked me to worship God every day and with that I am feeling better. This month I got menstruation for 3 days. I am hoping that prayers would help to give relief.

For excess bleeding she told me that I should boil Ashoka leaves in water and drink its extracted juice. It reduces the bleeding, I tried this. It really works.

I get excess bleeding during menstruation, also I get rash on my body and sometimes my body is swollen. I did not go to the doctor, I prefer to do home remedy.

Infertility

The pressure to conceive and bear children is evident from the words of women speaking about their experiences. Any delay in pregnancy is considered a very serious matter and is one of the few conditions that immediately receive attention from family members. A great amount of time and money is often invested into trying multiple treatments and methods until the problem is resolved.

I was only about 15 years when I got married. After two-three years only I could conceive it. So my elder sister-in-law always used to tell me that I am a banjh (infertile), that I don't have the capacity of bearing the children. So, my husband took me to Hospital X and there we had sonography. The doctor was very good, she was like you only. She told me, "Now you are quite young, so you are not

able to produce a child and your body is not yet capable for the pregnancy. Don't worry, everything will be all right."

Three years of married life gone very smoothly but one problem was there. I was not able to conceive again. So we started taking treatment for it. Medical checkup was done for both but no problem was found or diagnosed. I took allopathic and ayurvedic treatment. After one month of ayurvedic treatment, I conceived. Eight years back Dr. X was there...he treated me. We went to temple, did puja (prayer) by pujari (priest) and we have gone to mosque also. Over all Rs. 50,000 we spent for treatment...Doctor did not tell anything, he gave medicine and water in bottle (ayurvedic). I do not know what was there in water. But I was able to conceive. Now also I want to conceive and treatment was there but of no use. Just two months back I discontinued the treatment.

Religion plays a special role in the lives of many women who struggled with conceiving a child. One woman said:

I have this child after long duration of marriage... No treatment from doctor. We have gone to temple, mosque, did puja, and then we got this child.

Another woman described her current difficulties in getting pregnant, after trying for one year. She conceived a son 2 years ago and attributes that success to her many prayers and visits to the mosque. She believes her current difficulties are due to her husband's "thin semen" for which he is currently taking homeopathic medicine. However, upon further probing, the woman stated that they have intercourse only once or twice every two months. The frequency of intercourse may be too low to attribute to organic causes of infertility.

An appreciation of when, or how to, conceive a pregnancy seems to escape many women who have never had the proper education about their sexual and reproductive health. This applies to both men and women, as shown by the following comment from another woman in the community.

Soon after we got married, whenever we'd have sex, all the water (semen) used to flow out. I was not getting pregnant after 5 to 6 months. So he found a doctor and took me there. That doctor spoke to him separately and also talked to me...

He explained that my husband was not putting it in properly. That is why the water is falling out. After that I got pregnant and we never had any problems later.

Several women share alternative explanations and solutions to infertility. Although the relationship between the problem and treatment are not intuitively clear, they seem to be easily accepted by the women who have been raised in an environment that reinforces them.

After 2 to 3 years of marriage also I was not able to conceive. So everybody thought that I have some problem. I will never be able to give birth to any child. Near my neck there was few boil type of things, few elderly people were telling because of this probably I am not able to give birth...So from village I came to Mumbai and did the treatment at Hospital X. A lady doctor treated me. She was very good. She checked the boils and started treatment. She gave me a medicine and asked to continue for 5 years. She told me, if I take the medicine continuously, everything would be all right and I will not find the sign of those boils. No mark will be there on my neck. Then she guaranteed me that I would be able to conceive. Then I took the medicine for 5 years, and after 7 years of marriage, I could give birth to our first son.

Vaginal ulcers

Women with vaginal sores or ulcers frequently speak of the causes and treatment for their condition. Stemming from the ayurvedic tradition, heat within the body is often cited as a direct cause of genital sores. The following women found relief through either topical ointments or oral tablets, representing either allopathic or non-allopathic solutions to the problem.

Recently I got pimples around genitals and on the thighs. I got this after I ate badam (almonds)...I know it is because of heat (garmi) in the body. I shared about this with my husband and my in-laws family. My sister-in-law told me that she also had this problem, she went to the doctor, he prescribed ointment and she got relief, now there is nothing. She gave me the ointment, I am putting everyday, it is giving me relief. I should have gone to the doctor. I felt that I should put the ointment, if it does not give relief, then it is better to go to the doctor.

Doctor told me that I have blisters due to heat in my body. So she advised me to take oral pills. So then last 8 months I am taking per the prescription.

Thus, women speak about gynecological morbidity from a variety of perspectives. Some attribute morbidity to imbalances within the body, including poor diet or excessive heat. Others believe in divine intervention as a source of relief from morbidity. Some women refer to a variety of medical disciplines and philosophies when sharing their thoughts on gynecological symptoms. Very few women associate their symptoms with sexual activity. This suggests a lack of appreciation for the cause and effect relationship between sexual activity and gynecological morbidity. Furthermore, women seem oblivious to their exposure to sexually transmitted diseases, and consequently rarely mention any adjustment of their own sexual behavior.

While the FBSI and in-depth interviews record women's perceptions of gynecological morbidity, the clinical exams and laboratory tests document actual diagnoses of disease. Both sets of information are equally important, since women's perceptions are just as valid a reason for intervention as are laboratory results. The clinical and laboratory data are more objective measures of the prevalence of gynecological morbidity and contribute to a complete picture of morbidity in the community.

C. Clinical and Laboratory Results

To date, approximately 173 women from the 3 communities involved in the RISHTA project have been interviewed by the FBSI. Clinical examinations of these women are ongoing and as the results are received, they are coded and entered into SPSS. Pelvic exams of women in the study community are currently being performed once a

week at the Women's Project Health Clinic. The pelvic exam results of 40 women from the study community have been coded and entered into SPSS for analysis.

In general, the pelvic exams of the 40 women found few signs definitive of pathology or disease. No women showed any signs of abdominal tenderness. All vaginal exams were relatively benign, with a normal sized uterus that was smooth, firm and mobile. Results of the speculum exams noted discharge in about half of the women. The discharge was found in varying amounts with a range of characteristics; some were described as "minimal" or "profuse" while others were described as "trichomonal" or "candidal."

Four women (10 percent) had cervical bleeding upon touch, which may or may not be a sign of disease. If found in the context of other symptoms, cervical bleeding may contribute to a diagnosis of morbidity, such as cervical infection. In an otherwise healthy woman, minimal bleeding of the cervical tissue during the collection of an endocervical sample is not an abnormality that raises concern.

The most prevalent abnormality found on exam was genital prolapse in the form of a cystocele, rectocele or both in 14 (35 percent) of the women. There is therefore a large discrepancy between the clinical results and the fact that no women reported any symptoms of genital prolapse. The degree of prolapse found on exams may have been minor, in which case women would not necessarily perceive any symptoms of a mass protruding from her vagina. Only third degree genital prolapse would present with obvious signs and discomfort that would be reported by women.

Laboratory tests are being performed in conjunction with clinical exams of women from the 3 communities. Testing is still in progress and the time it takes to

receive the results depends on the test that was ordered. Therefore, each test has a different number of results available at this point in time. Despite representation from all 3 communities, the current profile of results is expected to be similar to that of women exclusively from the study community.

Approximately 80 samples of vaginal discharge have been collected and analyzed. Samples of vaginal discharge showed that nearly 95 percent of the women had white or colorless discharge, suggesting that the discharge was normal. Less than 2 percent had yellow-green discharge, a clinical signs of trichomoniasis. Less than 1 percent had gray, fishy-smelling discharge, which is fairly consistent with the 1.1 percent of women who reported foul discharge. Nearly 94 percent of the women had a vaginal pH less than 5; only about 6 percent had an abnormal pH that was greater than 5, suggesting the possibility of an infection such as bacterial vaginosis.

Microscopy of samples of vaginal discharge showed the presence of mycelia suggestive of a fungal infection in 2.5 percent of wet mount slides. Approximately 13.4 percent of the samples showed yeast cells. The whiff-amine test used to detect bacterial vaginosis was positive for 2.6 percent of the samples. Gram stains revealed clue cells in 2.4 percent of the samples, also suggesting bacterial vaginosis. Gram negative diplococci, or gonorrhea, were found in 3.7 percent of the samples.

No samples had any motile, flagellated organisms therefore pointing to a discrepancy between the appearance of yellow-green discharge and the presence of trichomoniasis. The yellow-green discharge may, however, be indicative of another disease process. Nearly 5 percent of samples showed more than 10 pus cells (or PMNs) in a high-powered field, a non-specific sign of an infectious process.

Blood tests were performed on different groups of women, reflecting the inconsistent availability of resources at the Women's Project Health Clinic. Over 100 women were tested for chlamydia. Overall, 15 percent of the women tested were positive for acute or lifetime chlamydia. Seven women, or approximately 6.6 percent, were positive for lifetime exposure to chlamydia. Nine women, or 8.5 percent, were positive for recent or active infection. This is slightly higher than the percentage of women who reported symptoms consistent with active chlamydial infection, such as vaginal itching, dryness, bleeding, foul discharge, swollen glands or burning urination. This discrepancy is expected since the majority of chlamydia cases are asymptomatic.

An acute syphilis infection was detected in just over 1 percent of the 83 women tested from all 3 communities. Lifetime exposure to syphilis was detected in nearly 5 percent. Over 6 percent of the 128 women tested for HSV-2 were acutely infected while more than 16 percent had been infected previously. Despite the numbers of women with laboratory evidence of acute syphilis and HSV-2 infections, no clinical exams reported any signs of vaginal sores or ulcers and barely 1 percent of women reported such symptoms. The higher rate of detection from laboratory tests may reflect a higher rate of disease in sub-sample of women whose blood tests have been reported but whose clinical exams have not yet been included in the data analysis.

A collective interpretation of all laboratory results produces the diagnoses listed in Table 7.3. Frequencies and percentages are reported individually as well as a total of both acute and lifetime infections.

Table 7.3 Laboratory Diagnoses of Gynecological Morbidity

Diagnosis	Sample Size (n)	Frequency	Percent
Bacterial Vaginosis	83	2	2.4
Candidiasis	82	11	13.4
Trichomoniasis	82	0	0
Chlamydia	106	16	15.1
Acute	106	9	8.5
Lifetime	106	7	6.6
N. gonorrhea	82	3	3.7
Syphilis	83	5	6.0
HSV-2	128	29	22.7
Acute	128	8	6.3
Lifetime	128	21	16.4
Non-specific Vaginitis	81	4	4.9

A comparison of the preliminary clinical and laboratory results of this study with the results of other community-based studies reveals that specific conditions are more or less prevalent than expected. The rate of genital prolapse in this study is extraordinarily high at 35 percent. This may be a result of sampling bias or ambiguous clinical criteria used by the physician. Other community-based studies also struggle with the issue of standardizing clinical assessment, which might explain the wide range of genital prolapse that has been reported. The results of this study tops the prevalence rate of 27 percent that was the highest rate reported by the 8 community-based studies discussed in Chapter 3 (Table 3.1).

Cervical bleeding was found in 10 percent of the women, which is within the prevalence range expected of a community this size. As already discussed, cervical bleeding is not necessarily a sign of disease. However, if all cases in this study are assumed to be abnormal, the rate of clinical cervicitis falls below the average found in the other community-based studies (range 8-48 percent; mean approximately 18 percent) (Oomman 2000).

The laboratory data presents a lower than expected rate of some of the more common conditions of gynecological morbidity. In particular, the prevalence of bacterial vaginosis in this study (2.4 percent) is much lower than in other community-based studies that detected levels as high as 62 percent (Bang 1989). This may indicate a sampling error, or faulty technique of the physician preparing the wet mount for microscopy.

At the same time, the rate of chlamydia in the study community is more than 7 times the highest rate found in the other community studies. Other studies may have reported lower rates of chlamydia because they did not include lifetime exposure. However, even acute chlamydial infection is more than 4 times higher than the rates reported by other studies (Table 3.1). More data and lab results will help document and explain the unusually high rate of chlamydia in women in the study community.

Candidiasis and syphilis fall within the prevalence range from other studies. The rate of non-specific vaginitis is on the low side of normal. The absence of trichomoniasis is plausible, as at least one other study detected it at a rate of less than one percent (Table 3.1).

HSV-2 is the most prevalent STI detected in the community thus far. Although the prevalence of HSV-2 in other community studies is not available for comparison, a rate of 22.6 percent seems high. The rate of acute infection is much lower in the community than lifetime prevalence, but any exposure to HSV-2 is concerning because it can reactivate with symptoms similar to acute infection. Characterized by sporadic recurrences of painful vaginal sores and blisters, HSV-2 potentially increases the risk of HIV transmission. The high rate of HSV-2 and the inability to effectively cure the disease have serious implications for HIV in the community.

However, medication is available to control recurrences of HSV-2 and thereby minimize the risk of disease transmission. Other gynecological diseases that increase the risk of HIV transmission also have medical regimens that control symptoms. The access that women have to health care services is therefore a crucial element in determining the course of disease.

D. Access to Health Care

Financial Constraints

Women's access to healthcare must be considered from several different angles, one of them being the financial. As has been described, the study community is poor with high levels of unemployment and low wage levels. Money spent on medical care often translates into fewer food items, clothing or other necessities to run the household. Women are as aware of the financial constraints upon the family as are their wage-earning husbands. For this reason, many women put their own health concerns on hold in order to avoid sacrificing other necessary expenditures. Some clearly value the health and comfort of other members of their family more than their own.

I have one or another health problem. I always try to avoid taking the treatment because it is so expensive. Ordinary medicines are also so expensive that we hesitate to buy it. If you are taking treatment, then you have to loose many things and have to sacrifice many other needs. So I really have to think twice before spending the money on my treatment or any other thing. If I were to have more money then of course everything would change.

But I am tensed only because of my health. Once I get operated, then all my problems would be solved. Because of the tumor I am not able to work. I am waiting for the time when we will have enough money for the operation.

During menses I have backache and lower abdominal pain. Sometimes when I feel very weak, I go to Dr. X. His medicine suits me, so I got to him. If he only gives medicine then he takes Rs. 15. If he gives injection and medicines, then he

charges Rs. 30. And if he gives 1 glucose, then Rs. 120. But generally, I avoid going to the doctor. I take home remedies for common problems like cold, cough and fever. But if my husband or son suffers with any problem then I directly take them to the doctor.

There is a wide discrepancy, however, in the reactions that husbands have towards spending money on the health care of their wives. One woman described her husband's attitude towards her chronic neck and shoulder pain.

Whenever I talk about it he ignores. He does not want to spend money for the treatment but I should bear the burden of household responsibilities whether I like it or not. I am not his slave.

In contrast, another woman describes how her husband encourages her to spend money on medicine, but how she herself has difficulty using the money for herself instead of her family members.

Nowadays I am not keeping well. Either I have cold and cough or some other problem. The sickness is quite frequent with me. I take treatment for my illness. Also I have the problem of white discharge. I need to spend on this. Sometimes I really avoid spending on... medicines. But my husband doesn't like all these things. He forces me to buy the medicine prescribed by the doctor...The doctor has advised me to take the protein powder with milk. The powder is very expensive. It costs around Rs. 80. So I am really not willing to buy the powder. Because if I spend Rs. 80 on powder, I have to expenditure on many other things. See, now I am suffering from cough also. The doctor has prescribed me cough syrup, which is also quite expensive. If I spend on these things then nothing left for my children and my husband and adequate money to run the house. So I am trying to avoid spending on these things.

As can be seen, women in the study community may hesitate to address their health care problems because they feel as though they can not afford the treatment. The delay in seeking care may exacerbate their illness, leading to more severe symptoms and consequences. However, even when women spend money to treat their health problems, they may increase their burden of stress because of the financial pressures they have placed upon their families. The result is a vicious cycle of worsening health.

If there is one problem then I can tell you but there are hundreds of such problems. I have body ache especially backache. I have giddiness and nausea problem. Sometimes I feel as if an insect is crawling in my head. I have pain in my neck till the spinal area. All these problems are very frequent. I get irregular menses and have pain because I get clots during menses. I have tension, because I had spend enough money on my treatment.

Autonomy and Mobility

Women's sense of independence naturally affects their ability to seek attention to their health care problems and directly impacts the expediency of their recovery from illness. Autonomy plays a crucial role in circumstances where women feel as though they cannot share their symptoms with other members of the family or friends, as is often the case with gynecological problems. If women need permission to step outside the house or to seek medical attention, they may have an even harder time doing so if the nature of their problem is loaded with negative cultural connotations.

Women in the study community offer somewhat contradictory responses to questions that attempt to assess their level of autonomy. Forty out of 90 women stated that they must ask their husband or another relative for permission to leave the house; 28 women said that this is only somewhat true for them and 22 women said that it is not true at all. At the same time, 58 of the 90 women stated that they are able to seek health care services on their own, while 17 said that this is somewhat true for them and 15 said that this was not true at all. Therefore, the issue of whether a woman is able to make her own decision to leave the house for medical care appears to be a rather complicated one.

In in-depth interviews, women who generally feel positive about their marital relationship expressed their appreciation of a husband who establishes and enforces rules of the household.

I admire my husband, he is very good. He is dominating, but he dominates only for my good. He has full right on me. He doesn't allow me to go out of the door, but I don't feel bad. I want them even my daughters should get a husband like him. And my daughters should become like me.

Husband is husband, and what is there in his mind we can not say. I have to listen to what he is saying. After all he is husband, and if he says anything I have to listen to it. It's necessary. I think it's important also and I do not feel anything wrong in it. It happens in life. Before marriage, women are in custody of parents, after marriage under in-laws and if in-laws are not there, then husband. I think it's right also.

However, other women who make decisions independently clearly value their ability to move freely about the community without their husband's permission. Some respect their husbands for granting them independence, and they show their appreciation by willingly telling him about their whereabouts.

My husband has given me all the power. I am totally free to do whatever I want to do. My husband doesn't restrict me doing anything...I can go anywhere I like.

He is a very nice person. He never restricts me for anything. But I think it's better to tell him where I am going and when I will be back. He will feel good about it. Every time I tell him where I am going.

Thus, women in the study community have different degrees of mobility and different perspectives on the issue. Women's access to health care services depends on a complex interplay of household dynamics, including their financial and marital status. Whether a visit to the doctor is an independent or joint decision, it is one that should be made with the best interests of the woman's health in mind. Aside from access to health care, the approach that women take towards seeking treatment and the quality of care they receive are the determining factors for successful treatment.

D. Treatment-seeking Behavior for Gynecological Symptoms

Women who sought treatment for gynecological problems overwhelmingly preferred to go to a provider within their own community. Between 72 and 80 percent of the women first saw a provider within the study community. As already discussed, women do not necessarily have correct knowledge of the providers' medical background. However, the majority of women reported that the first provider who treated their symptoms had a background in allopathic medicine. Specifically, between 58.5 and 66 percent of the women who were treated believed that their provider had an "MBBS" degree. The percentage of women who first sought treatment from an ayurvedic provider was between 3.2 and 9.8 while the proportion of women who first selected a homeopathic provider was between 4.8 and 7.3 percent. Unani providers were the first line providers for less than 5 percent of the women seeking treatment.

Women reported a wide range of responses to treatment. Most women (51.6 to 65.9 percent) did not report "complete relief" from their first trial of treatment. However, the number of women who reported absolutely "no relief" from treatment remained below 20 percent. Therefore, a substantial number of women experienced at least partial relief of their symptoms after receiving treatment. The number of women who sought further treatment for symptoms that were not completely relieved is relatively low, between 5 and 15 percent.

As shown in Table 7.1, a significant proportion of women who experience gynecological symptoms and associated health problems make an initial effort to find appropriate treatment. The level of satisfaction for women in search of complete relief of

symptoms remains relatively low. Perhaps the disappointment with their first treatment trial for a symptom discourages them from seeking further treatment for better results.

However, the cure rate is not the only determining factor for women's perception of and response to treatment. As will be seen, the level of effort and interest expressed by the provider plays a significant role in treating physical as well as emotional health problems. The following section focuses on women's perception of the health care system and the treatment available to them.

Women's Perception of Treatment

Although the choices for qualified medical treatment may be limited, the decisions that women make regarding their health care are highly variable. Some women do not hesitate to seek medical attention, especially for their family members. If satisfied by the treatment, they return to the same health care provider in full faith. Other women methodically go through different providers or even different medical practices until they find relief for their symptoms. Still, others rely on home remedies as opposed to care from government or commercial providers.

The following women express a certain amount of reliance on their private health care provider to treat themselves as well as their family.

But whenever I or my children face any problem, we go to some or other doctor in the community. If relief is not there, then I immediately change the doctor. I had also been to Shitabdi Hospital for tumor treatment, they said that it will require money for the operation. But I don't have money.

I felt irritation and itching in my vagina. Then I found pus discharge. Simultaneously my husband also had some problems...We went to see Dr. X. He is our family doctor. For every small problem, usually we visit him. He gave me some medicines and syrup. Also he gave some medicines to my husband and

advised us to abstain from sex for 20 days. We followed his instructions and after that everything was all right.

Some women recognize the limitation of their health care providers. As expressed by the following woman, certain types of medical problems are more easily tended to than others. The lack of mental health care services is powerfully captured in her statement.

If problems are related to maternal health, like water discharge, vomiting, body ache, then easily it gets treated. When I had these problems during my pregnancies then I got cured with the medicines, means at least I was relieved for sometime. But for mental health, God will only save me.

Some women seek treatment from one type of provider, for example an allopathic provider, and, if dissatisfied, they switch to a provider from an entirely different discipline. The following are examples of women whose symptoms were not relieved by allopathic regimens.

I often experience a sense of fear and my heart beats very fast. This has been happening since the last 5 years. I have gone to a private doctor. He gave English medicines. But those were too hot for me so I discontinued...I would sweat a lot, have acidity, feel lethargic and sleeping all day long, did not feel like eating.

I do have health problems such as body ache, headache, backache and fast palpitations. I had been to allopathic doctors but did not get relief. So, I went to Hakim, and now his medicines are working on me. He had told me that main cause of my bad health is stomach problem. So he has given me medicines to clean my stomach. By taking those medicines, I go to toilet twice and thrice and really I feel improvement in my health.

Home remedies play a large role in the health care of many women in the community. Some express an outright preference for preparations made at home, regardless of the medical condition. These are often passed down from one family member to another.

From the last 10 years I am doing deliveries, conducting rituals to protect mother and children from evil eye, breathing problem of children, pain in hand and leg and other common problems. For all these I am giving home remedies.

There was one incident once I got rash all over my body. It was itching very badly. Those days elders used to believe in home remedy. So my mother asked me to put herb (kokum) all over my body. It cools the system. Then I was nine years old.

However, other women describe a conditional decision-making process in which they handle certain health problems with home remedies but refer others to private health care providers. Sometimes, the decision is based on who is ill in the family, reflecting the woman's perception of her status in the family and the value that she places on her own health. Other times, the decision may be based on the severity of the illness. The cost of the treatment naturally comes into play when making these decisions.

Generally I avoid going to the doctor. I take home remedies for common problems like cold, cough and fever. But if my husband or son suffers with any problem then I directly take them to the doctor.

Whenever anyone gets ill in the family, I try to give them household remedies such as if I am having burning throat, then I apply lime on my throat, as it gives me some relief. But if anyone is severely ill, then I take them to Dr. X. His medicine suits all of us, so I prefer going to him.

For some women, their lack of health education comes across in how they express a lack of awareness about the need for medical attention and the role of a health care provider.

The only health problem I have is my lower back pains badly, even my knees, ankle and sole pains badly in the morning. When I want to keep my leg on the floor, for few minutes I cannot, after sometime it becomes normal. This problem started two years ago and I had not gone to the doctor. I also feel the pain below my ribs. I feel that something is moving like a small lump in the stomach. For this too, I never went to the doctor.

Interviewer: Why did you not consult the doctor?

I did not think it is a disease or some serious problem. Right now every body is asking you are not on Roza (fast), then I have to tell them that I discontinued it. Then they said go to the doctor, then only I realized it as problem.

Another woman described relatively serious vaginal and urinal symptoms, and she simultaneously expressed her views on professional medical care.

Oh, it would hurt a lot down there. There was swelling and burning. I had difficulty in passing urine. There was burning. I would cry but I did not speak about it. And what could a doctor do?

Negative Perceptions of Medical Treatment

The interactions that women have with health care providers in the community shape their perceptions of the services available to them. Women with negative experiences express disdain towards the health care providers who failed them. In general, women who are critical of their health care system emphasize a lack of quality, efficacy and trust in the providers.

Quality

In an in-depth interview, one woman's story echoes that of many others as she launches into an extensive review of treatment failures for her gynecological symptoms. "Deepa," a 25-year-old woman with a 2-year-old child, started having white discharge at the age of 12. Although she did not tell anyone about the discharge for the first 5 years, she eventually could not ignore the stains on her clothing, the perpetual burning sensation and the constant smell of "unbrushed teeth in the morning." In association with the discharge, she felt very weak and achey in her joints.

Between the ages of 19 and 23, Deepa saw a total of 15 health care providers for her problem with white discharge. On the recommendation of a family friend, she started with a hakim, or unani provider, whose office was in a large city hospital 40 minutes

away from her home. The hakim gave her medicine that relieved the symptoms for only 3 to 4 days. She then went from doctor to doctor, some allopathic and some AYUSH practitioners, but all of whom were either recommended by friends or conveniently located.

The practitioners all offered various reasons and minimally effective treatments. Some stated that the discharge was due to her sexual desire and would be resolved only after she consummated her marriage. Others believed it would resolve after she had her first baby. Still others felt that the discharge was a sign of excessive heat within her body and advised her to have cold foods and avoid tea and sour foods. Deepa herself believes that the discharge was due to a combination of all these reasons; she found that her symptoms resolved only after she gave birth to her baby which has transferred the heat from her body to her son's.

Of the 15 providers, only 3 or 4 were male, and Deepa denies having any gender preference. In fact, when asked which practitioner provided the best treatment, Deepa answered with the name of one female allopathic doctor as well as one male unani provider. The male practitioner was outstanding simply for his effort; Deepa remembered his desire to call a meeting of doctors in the community to discuss her problem, but Deepa discouraged him because she felt shy about having her condition shared among so many people.

The providers that Deepa visited conducted numerous lab tests and prescribed multiple medications, but very few performed physical exams. Of the 15 providers, only 1 conducted an invasive pelvic exam. Only 2 even looked at her genitals. Deepa had

blood tests, stool and urine tests, and ultrasounds, but she could not recall any practitioner ever testing a sample of her vaginal discharge.

This lack of effort and carelessness shown by some providers is a source of criticism for other women who have been disappointed by the quality of health care.

Another woman suffering from white discharge shared her story and expressed her hope in visiting the next level of service providers:

Since last four months I am suffering from white discharge...I consulted the doctor in the next lane. I gone to the doctor twice. The doctor charges around Rs. 30 per visit. But I did not get any relief from the treatment. The doctor didn't examine me properly. I told him about the problem I am facing. Then the doctor gave the medicines to me. Without diagnosing, the doctor hardly took 5 minutes to give the medicines to me. I am not satisfied with the medicines and still I am having that problem. Sometimes it is so horrible that my clothes start stinking. So I am planning on visiting the municipality hospital in the community. It's a big hospital. I think there are many doctors. So if I go there I will be getting proper advice from them and I think this problem will be solved.

Some women spoke of the blatant disregard and disrespect that health care personnel have towards their patients. One woman shared her experience at a government hospital.

There I got operated, but the doctors and nurses were not treating me well. They were very rude towards me. I had stitches in my stomach, before healing one day they called me to remove my stitches. At that time, no one was with me. I had told them to wait for my husband, but they did not wait for him and removed the stitches. I was crying in pain and they discharged me.

Other women detect a deficiency in the skills or training of the providers. This woman cited a critical mistake in her doctor's approach and she and her family must now suffer the consequences.

For few months my husband used condom, afterwards with the doctor's advice I started taking pills. It didn't suit me, I was getting giddiness and palpitations. The doctor advised me to stop for one month. I shared my anxiety since my husband is not using anything. The lady doctor said that the effect of the pills would be for sometime and there is nothing to worry. After a few days, I felt giddy and nauseous. I had to go for urine test and I am pregnant for the fourth time.

Efficacy

Women question the need for visiting health care practitioners when they find that the providers offer little insight into their problems or relief from symptoms. Some women describe the dismissive attitude of practitioners while others point towards pure inefficiency.

I always visit doctors regarding my problems. When I tell them about my problem, they just say that it is not a problem. Some of the doctors gave some medicines to me but no relief. I went to "maulana" (faith healer) but he also told that it is not a problem. Isn't fits (mirgi) a problem? I don't understand if it isn't a problem then why am I still suffering. My husband had also taken me to Sion Hospital but no outcome. I had also done my whole body check-up but still no cure.

Sometimes I feel that the medicines are not effective, example. The cough medicine, prescribed by the doctor is not very effective. So, it is useless. That's why I don't feel like spending money on these things.

Trust

In a financially constrained environment, women are constantly weighing the costs and benefits of medical care. When the quality or efficacy of care has proven unworthy, they question the need to continue with treatment. Some women go further and question the honesty of the practitioners who may be cheating them into spending more money for worthless medications. As can be seen from the following comments, no medical discipline is free of suspicion:

I had gone to the Hakim (Unani). He gave me some medicines and I felt better after taking them. But when I told him this, I think he changed the medicines. He did not want me to get better. Then he would have lost the money I was paying him, no?

For different reasons I have to go to different doctors. One particular doctor is not able to cure me. Sometimes I think, even doctors don't know anything, they only try to pull money from us.

I had no idea that all these days it was me wetting the bed and I was blaming my children! Then I realized that it was the effect of the medicine, which the Hakim had changed. As soon as I stopped taking the medicines, this problem too went away. The Hakim had done some tricks and gave me medicines so that I would be completely under his control and never discontinue the medicine.

While the quality of care that women receive may be dubious, the importance of seeking timely attention to problems in gynecological health should not be ignored.

Whether or not women are willing to seek care is partially determined by the quality and efficacy of the care that they expect to receive. Methods of improving the quality of care for women's gynecological health, both in terms of medical training and communication skills, must be considered an inherent part of any program that aims to decrease levels of gynecological morbidity in India.

In summary, women in the study community perceive a significant amount of gynecological morbidity or related symptoms known as "kamjori." They speak about these symptoms in reference to various Indian medical disciplines but fail to make connections between sexual activity and disease. Preliminary data suggests that women in the study community have lower rates of disease, such as bacterial vaginosis, than previous studies have documented India. At the same time, women in the study community have higher rates of chlamydia and HSV-2.

Comparisons aside, women in the study community present a profile of gynecological morbidity that has implications not only for their current health but also their risk of HIV infection. Therefore, timely treatment of gynecological morbidity is essential for preventing an epidemic that could devastate the community. Women's

access, approach and reaction to health care services influence their treatment-seeking behavior. Unfortunately, negative perceptions of the health care system are often well founded and interfere with the delivery of adequate care for gynecological problems.

Chapter 8

Recommendations and Conclusions

A. Summary of Findings

This Thesis presents a picture of gynecological morbidity in India at the community level. Women in the study community lead a hard lifestyle that is common in poor, urban communities throughout India. They report a high burden of gynecological morbidity, primarily due to RTIs, and most of these are sexually transmitted. Gynecological morbidity is often neglected because of sociocultural reasons. Women do not have access to adequate health care for these symptoms.

Women in the study community reported an average of 5 gynecological or related symptoms. The most frequently reported symptoms fall under “kamjori,” a syndrome of weakness or fatigue. This constellation of symptoms is associated with gynecological symptoms such as white discharge. At the same time, it is closely tied with the emotional status of a woman. Stress, anxiety, and depression brought upon by household burdens, tension or violence can produce psychosomatic symptoms that constitute “kamjori.” Therefore, gynecological morbidity is not an isolated health issue, but one that is couched in the complexity of factors that govern women’s emotions, actions and decisions.

Reports from women about their daily lives and their gynecological symptoms contribute to a multi-dimensional approach of understanding gynecological morbidity. Women’s comments about their household work, relationships and sexual activity reveal that social, economic and cultural factors influence their perception of health. Furthermore, women associate gynecological symptoms with economic hardship, internal disturbances of heat or diet, emotional distress or physical demands.

While a significant portion of men in the community have engaged in risky sexual behavior, relatively few women attribute their gynecological symptoms to their husband's behavior. There are several explanations for this. For one, women may not be aware of their husband's activities and therefore perceive themselves to be at low risk of STIs. Other women may not know the significance of specific gynecological symptoms and lack the knowledge to make such connections.

Women in the community adhere to health belief systems that offer alternative explanations for their symptoms; for example, ayurveda attributes symptoms to imbalances within the body. Women following ayurveda would therefore be unlikely to articulate external sources of infection, although the principles of ayurveda acknowledge external sources as causes of internal imbalance. Health care providers within the community are mostly of the AYUSH disciplines and often reinforce these alternative interpretations of physical signs and symptoms.

The experience and interpretation of gynecological morbidity for women in the community is a reflection of the gender discrimination they face in Indian society. As women, they marry young and are exposed to sexual risks not so much from their own behavior their husbands'. The dynamics of marriage and the household often devalues their needs and concerns, placing greater value on other family members or issues. Financial constraints and household rules governing mobility inhibit women from seeking medical attention on their own. In such an environment, women learn to neglect their own health, delaying treatment that could prevent serious complications.

Women who do seek help for their symptoms may be exposing themselves to risks of ineffective or improper treatment from health care practitioners who lack training

or equipment. Verification of professional training is poorly enforced in communities where the private practitioners thrive on the demand for services from a clientele that does not question their qualifications. Women with gynecological symptoms can choose from a number of affordable private providers, almost all of whom are male, non-allopathic, inexperienced with gynecological issues and unprepared to perform a pelvic exam. While doctors' offices may be found on every block of the study community, the dubious skills of the providers make access to health care for poor women in the study community an elusive reality.

Inadequate gynecological health care poses serious risks for women, the community and society at large. If left untreated, gynecological disease may cause irreversible damage to the female reproductive tract. This threatens to not only compromise a woman's reproductive capacity but also increase her risk of potentially fatal complications, such as ectopic pregnancy or systemic infection. Gynecological morbidity, if unchecked, increases the risk of HIV infection for women, and inevitably, for their husband and children. The social repercussions of such widespread disease transmission are devastating.

Therefore, now is the opportune time for intervention to improve gynecological health services. Addressing gynecological morbidity in the community will help control rates of disease on the national level. Efforts to improve the gynecological health of women must account for prevention, assessment and treatment of disease. Women must be educated about symptoms and indications of disease, as well as modes of transmission. Providers must be equipped to address the concerns of women and effectively diagnose their condition. Expectations and delivery of care need to be

elevated to ensure that gynecological morbidity is adequately addressed and further prevented. Each step along the way, emotional, financial and sociocultural factors in women's lives must be considered. The scope for change is large and the future of women's health is hopeful.

B. Recommendations

Effective efforts to improve services must involve both private and public health care sectors, with the support of community advocates and leaders. Although proposals for change include many segments of society, the approach to reform should be tailored specifically for each level of intervention. Successful intervention projects account for cost, feasibility and sustainability.

Provider level interventions

There are several barriers to the provision of quality gynecological services in the current health care system of the study community that must be addressed before proposing viable reforms. To begin with, a lack of resources is an issue that both public and private practitioners confront on a daily basis. The poverty of the community and the competition for government aid limit the financial resources of providers. Even private practices that are popular with patients maintain offices limited to one room with one examination bed and no laboratory equipment.

Therefore, the potential to address gynecological morbidity is limited by a lack of resources that is associated with a lack of space and diagnostic equipment. The small quarters of most private offices make physical exams of patients difficult. In particular, pelvic exams of women would be extraordinarily cumbersome in a room that has barely enough space for the patient, doctor and examination table. Examination rooms in

government health care facilities are more spacious, but the examination tables are as unequipped for pelvic exams as those in private offices; none of the beds have stirrups that hold a woman's feet in position during a pelvic exam. Furthermore, neither private offices nor public health care centers have microscopes or slides to perform simple tests that help in the clinical diagnoses of common gynecological diseases.

Even if presented with more space and resources, health care providers in the community are limited in their ability to assess gynecological disease because of sociocultural norms that prevent a male from physically examining a female. Since most of the private practitioners that serve most of the women in the study community are male, this gender barrier applies to the majority of women seeking treatment for gynecological morbidity. Male providers never perform pelvic exams and, at most, conduct very non-intrusive physical exams. Many women in the community have never had a pelvic exam, even at throughout the course of prenatal care during their pregnancies (Schensul, personal communication).

Tackling the gender barrier may be beyond the scope of reform for this community that has a healthy number of experienced providers who are male. Although this reduces the chances of pelvic exams being performed on a routine basis, it need not limit the potential for improving gynecological services. Physical examination is useful for making a diagnosis, but the most important step is obtaining a thorough history from the patient. In fact, excellent history-taking skills allow physicians to make 80 percent of a diagnosis without ever examining the patient (UConn School of Medicine clinical skills curriculum).

Herein lies a possibility for upgrading the quality of services in good measure and at low cost. Training seminars could teach health care providers effective history-taking skills. Specifically, the seminars could teach providers how to discuss matters relating to sexuality and gynecological disease. The training session could lead them through the process of taking a detailed history of women's symptoms and asking them appropriate questions that help narrow down a list of possible diagnoses. The seminar could also develop more general communication skills, such as allowing the patient to speak freely and avoiding "yes" or "no" questions. Providers should be trained to appreciate the significance of offering positive reinforcement to their patients and encouraging them to ask questions.

Aside from improving communication and history-taking skills, a training seminar for health care providers could introduce a syndromic management model for treating gynecological disease. Since most providers rely on only the patient's history to arrive at a diagnosis, they should be trained to use the information to make appropriate decisions about treatment. Perhaps an algorithm for treating specific constellations of symptoms could guide providers in making decisions about which patients to treat and which medications to prescribe.

The disadvantage of syndromic management is that the same symptoms do not present consistently with the same disease in different women; therefore, many diseases will be diagnosed and treated incorrectly. The inappropriate use of medications, particularly antimicrobial agents, increases organism resistance to the medication, thereby decreasing its efficacy. However, considering the many barriers to effective

treatment in the study community, syndromic management may be the best option available for controlling the spread of gynecological morbidity.

The RISHTA Male Sexual Health Project held a seminar for providers that had a similar curriculum of communication skills and treatment models for male sexual health problems. An evaluation of the efficacy of the intervention is currently in progress, but the training seminar was well received by those who attended. It is hopeful and expected that these same providers will welcome the opportunity to attend a seminar for addressing women's health concerns.

Experts in the field of gynecological health, identified by the RISHTA project staff, could lead the training seminar. Organized over a series of days, the seminar could cover a range of topics including history-taking and treatment of gynecological disease. The seminar could review definitions of disease, improving the providers' knowledge of gynecological symptoms. There could be a discussion of factors that contribute to morbidity and women's perceptions of disease. Finally, links between gynecological morbidity and issues of domestic violence or mental health could be emphasized to increase awareness of all aspects of gynecological morbidity. Although the providers may not be trained to address these issues, they could learn when and how to refer women to appropriate social services and counselors.

The training seminar should be held for private practitioners, before involving public health care providers. Priority is given to private practitioners because women report a preference for private practitioners within their community to address their gynecological problems. Therefore, improving the skills and facilities of the largely

male, AYUSH practitioners would be a focused and effective method of improving services for women.

Considering the large numbers of providers that have established themselves in the community, the most effective approach is to integrate reforms into the current system of health care, as opposed to building an entirely new system of clinical services. However, the establishment of a permanent women's health clinic that could address the full range of issues involved in gynecological morbidity would be a great asset to the community. The Women's Project Health Clinic is a step in the right direction. Although the clinic is held only once a week and serves a relatively small, selected sample of women, it could be the beginning of regular gynecological health care services in the community. The weekly presence of an OBGYN in the Urban Health Center is an important foundation upon which to expand clinical gynecological services. With the proper leadership and resources, the Women's Project Health Clinic could develop into a women's health center that offers not only pelvic exams and diagnostic tests, but also counseling and referral services.

Community level interventions

If clinical services are improved, then women must be educated and encouraged to make use of the services. With health education classes indefinitely canceled, women in the community have no source of standardized information regarding sexual development, reproduction and gynecological health. Women who remain uneducated about sexual and gynecological health will never be able to make wise decisions in seeking the services that have been provided for them.

The education of women is vitally improvement in the process of improving their health. To protect their health and to prevent morbidity, women need more knowledge about gynecological health to make informed decisions on contraception, sexual activity and fertility. Informal networks of women already exist in the community, as NGOs, mahila mandals or Health Post CHVs. If given the proper training and education themselves, these female members of the community are in the position to educate a large number of women. The nature of their work, particularly that of the CHVs, gives them the opportunity to speak with women in their homes, in a potentially private, non-threatening environment for discussing sexual and gynecological health issues. Furthermore, CHVs or members of the mahila mandals could be the first to receive gynecological services, such as routine pelvic exams, and then share their personal experiences with other women. They could make women feel more comfortable with the idea of physical exams and encourage them to seek attention to gynecological symptoms.

Along with education, women need the mobility and freedom to access the services that have been provided for them. A husband's refusal or a family's neglect can stand in the way of many women who may otherwise seek attention to symptoms they know are abnormal. Increased knowledge and clinical services are useless for women who can't assert their rights to access them.

Therefore, the principal issue for improving women's health is empowerment. Since so much of gynecological morbidity is wrapped with the social, cultural and economic factors that have kept women in a subordinate position in society, the empowerment of women is a necessary step towards reducing their risks of disease. As stated in one article outlining an agenda for social reform:

What is needed is not a few isolated welfare programs for women but the systemic incorporation of a gender perspective throughout the entire gamut of social policies and programs. The socioeconomic context that causes reproductive ill health and gender inequality must be addressed and social norms that impinge upon sexual health must be challenged. Medicine and technology alone are not adequate (Rishyasringa 2000).

Improvement in gynecological health calls for structural changes to empower women. A reduction in the “triple workload” of women – reproduction, domestic work and productive labor – would reduce physical as well as emotional stress. A change in the power dynamics between men and women would allow women to assert economic, social, sexual and reproductive rights.

One approach towards promoting the education and liberation of women is to educate and appeal to men. Men need to be sold on the idea that their quality of life will improve if the health of their wives improves. The effect of gynecological morbidity on women’s productivity, as a consequence of its effects on physical and emotional stamina, shows that women’s health is a major factor in the stability of the household and family. If men are made aware of the connection between the health of women and the status of the household, they may be more willing to pay attention to the needs and concerns of their wives. Furthermore, if they recognize the links between their own behavior, either sexual or emotional, and the health of their wives, they may listen more carefully to advice about using protective barriers of infection and refraining from physical and sexual violence. “For the successful empowerment of women, men, too, have to adopt responsible behaviors relating to fertility, disease transmission and child care” (Rishyasringa 2000).

Thus, the education of men is an inherent piece of any program geared towards improving women's health. Male participation is necessary to adjust power dynamics of the marital relationship that determine women's access to education and health care services. But social and behavioral norms within the community suggest that most men will not participate on their own. Strong leadership with persistent influence in the community is required to reform such deep-seated cultural norms.

Powerful advocates, or prominent leaders, are needed to mobilize the community to support changes that benefit the gynecological health of women. Women's health advocates are gaining ground, but securing leaders to promote such a comprehensive program for gynecological health has been difficult. One reason is that the lack of data about gynecological morbidity has made it difficult to draw attention to the issue. Also, the poor, illiterate women who suffer from the burden of disease have remained ignorant or neglectful of their health concerns in the context of other difficulties in their lives. Therefore, the issue of gynecological health has had to rely on more advantaged members of society recognizing its importance and drawing attention to its cause (Ramasubban 2000).

India historically has provided only limited health care services for women, but recent recognition of the abundance of gynecological problems unrelated to pregnancy and their associations with HIV have increased research efforts and services dedicated to reducing gynecological morbidity. Over the years, the argument for providing women-centered, comprehensive reproductive health services has gained momentum. However, "inadequate funding of programs in the health sector has been the continuous bane of public health activity in India" (Rishyasringa 2000). Once again, the issue boils down to

resources, and the divide between the developing and developed world shows its relevance. With or without resources, there is hope for the future of women's health in India, but only if the political and social environment embraces a leader who is dedicated to changing medical and sociocultural norms.

C. Conclusion

The world of public health has neglected women as a distinct group with its own health care needs and priorities. This blatant disregard for women's rights is perhaps a consequence of male domination, not only on the international level but also on the local level. On the one hand are the influential policymakers who have ignored women and their health outside of the realm of pregnancy. On the other hand are the family patriarchs who have prevented women's voices from being heard.

Gynecological morbidity has consequently affected millions of women, while public health agendas continued to focus on family planning and maternal and child health. While many disease entities affect both men and women, they affect women more frequently and more severely, sometimes leading to infertility and death. Women are more susceptible than men to infectious diseases not only because of biological factors, but also because of their subservient position in society and in marriage. With a higher risk of disease and more to lose, women have failed to be recognized by policymakers as a distinct group with specific health care concerns.

Women's health in the developing world is at risk and there is need for urgent action. Yet, leaders in the field of public health have been slow to respond. This is a function of limited resources as well as cultural biases against women. There have been few research studies and even fewer interventions to combat the disproportionately

higher rates of gynecological morbidity in the developing world. Studies in Africa, South America and South Asia have shown that more women are suffering from severe symptoms of gynecological diseases than women in the developed world (Wasserheit 1989). Lack of information on gynecological health make women in the developing world less likely to recognize symptoms of disease; sociocultural barriers make them less likely to seek help. As a consequence, women in the developing world are more vulnerable to serious, chronic complications of their diseases (Bhatti 2002).

As in much of the developing world, poor women in India report a high burden of gynecological morbidity. The link between gynecological diseases and an increased risk of HIV infection caught the attention of public health leaders in India, a country projected to have the highest number of HIV infections in the world. The red flag of an impending HIV crisis in combination with the rising prominence of women's health advocates is finally bringing women's health to consideration.

The reproductive health framework India introduced 10 years ago is equipped with rhetoric focusing on the needs and priorities of women, but India has failed to make this a reality. An article from 1994 suggests that India needs programs that "enable women to better articulate their needs and to utilize available resources more effectively" and that "the health service system should be made more sensitive and responsive to women's multiple reproductive health needs" (Pauchari et al 1994). Ten years later, this is also the recommendation of this Thesis.

This is a critical time for India to mobilize efforts to address gynecological morbidity, while the chance for controlling the spread of deadly disease remains. The

need for prevention is evident and the call for action is clear. How India responds will affect the health and lives of many generations in the future.

Bibliography

- Askew, I., Berer, M. "The Contribution of Sexual and Reproductive Health Services to the Fight against HIV/AIDS: A Review." *Reproductive Health Matters* 2003; 11 (22): 51-73.
- Bang, R.A., Bang, A.T., Baitule, M., Choudhary, Y., Sarmukaddam, S., Tale, O. "High Prevalence of Gynaecological Diseases in Rural Indian Women." *The Lancet*, January 14, 1989.
- Bhatia, J.C., Cleland, J., Bhagavan, L., Rao, N.S.N. "Levels and Determinants of Gynecological Morbidity in a District of South India." *Studies in Family Planning* 1997; 28 (2): 95-103.
- Bhatti, L.I., Fikree, F.F. "Health-seeking behavior of Karachi women with reproductive tract infections." *Social Science and Medicine* 2002; 54: 105-117.
- Brown, J.S., Crombleholme, W.R. (editors) *Handbook of Gynecology & Obstetrics* 1993. Appleton & Lange.
- Centers for Disease Control and Prevention. *Sexually Transmitted Disease Surveillance*, 2002. Atlanta, GA: U.S. Department of Health and Human Services, September 2003.
- Coyagi, B.J. "Maternal Mortality and Morbidity in the Developing Countries like India." *Indian Journal of Maternal and Child Health* 1991; 2 (1):3-9.
- Das, S., Yemul, V., Deshmukh, R. "Incidence and association of HIV and other STIs in 200 persons belonging to a high risk group in central Mumbai." *Venereology* 1998; 11 (1) :19-23.
- Dasgupta, S. "Reproductive Morbidity." *Journal of the Indian Medical Association* 1995; 93 (2):55-57.
- Fleming, D.T., Wasserheit, J.N. "From epidemiological synergy to public health policy and practice: the contribution of other sexually transmitted diseases to sexual transmission of HIV infection." *Sexually Transmitted Infections* 1999; 75 (1): 3-17.
- International Institute for Population Sciences (IIPS) and ORC Macro. 2000. *National Family Health Survey-2 (NFHS-2)*, 1998-99: India. Mumbai: IIPS. Chapter 8 –"Maternal and Reproductive Health." Pp. 301-314.
- IIPS and ORC Macro. 2001. *NFHS-2, India, 1998-99: Maharashtra*. Mumbai: IIPS. Chapter 5 ("Family Planning") and Chapter 8 ("Maternal and Reproductive Health"). Pp. 7-100, 215-219.

Khan, Reshma Mushtaq. Public Health Nurse, Shivaji Nagar Health Post. Govandi 400043. Interview. February 23, 2004.

Kumar, S. "India has the largest number of people infected with HIV." *Lancet* 1999; 353.

Latha, K., Kanani, S.J., Maitra, N., Bhatt, R.V., Senapati, S.K., Bhattacharya, S., Sridhar, S., Giri, G.B., Shah, P.P., Shah, S.P., Desai, L.A., Parikh, I., Taskar, V., Dharap, N., Mulgoankar, V. "Prevalence of clinically detected gynecological morbidity in India: Results of four community-based studies." *Journal of Family Welfare* 1997; 43 (4): 8-16.

Lokhande, Dr. Sharmistha. Full Time Medical Officer. Baiganwadi Health Post. Interview. February 26, 2004.

Maniar, J.K. "Health care systems in transition: The current status of HIV/AIDS in India." *Journal of Public Health Medicine* 2000; 22 (1): 33-37.

Mekki-Berrada, M., Schensul, S.L., Narvekar, S.S., Verma, R.K., Saggurti, N. "Men's Sexual Health and Traditional Healing Systems in Urban Slum Communities of Mumbai, India." Unpublished manuscript, 2004.

Narvekar, S.S. Interview. February 13, 2004.

Oomman, N. "A Decade of Research on Reproductive Tract Infections and Other Gynaecological Morbidity in India – What We Know and What We Don't Know" (Chapter 6) in *Women's Reproductive Health in India* 2000, Ed. by Ramasubban and Jejeebhoy, Rawat Publications. Pp. 236-279.

Oomman, N. "Poverty and pathology: Comparing rural Rajasthani women's ethnomedical models with biomedical models of reproductive morbidity: Implications for women's health in India." Dissertation submitted to the School of Hygiene and Public Health, Johns Hopkins University, Baltimore. 1996.

Pachauri, S., Gittelsohn, J. "Summary of Research Studies and Implications for Health Policy and Programmes" (Chapter 11) in *Listening to Women Talk About Their Health Issues and Evidence from India* 1994, Ed. by Gittelsohn, et al, Har-Anand Publications. Pp. 185-199.

Pachauri, S. "Women's Reproductive Health in India: Research Needs and Priorities" (Chapter 1) in *Listening to Women Talk About Their Health Issues and Evidence from India* 1994, Ed. by Gittelsohn, et al, Har-Anand Publications. Pp. 15-39.

Patel, B.C., Barge, S., Kolhe, R., Sadhwani, H. "Listening to Women Talk about their Reproductive Health Problems in the Urban Slums and Rural Areas of Baroda" (Chapter 8) in *Listening to Women Talk About Their Health Issues and Evidence from India* 1994, Ed. by Gittelsohn, et al, Har-Anand Publications

Patel, P. "Illness Beliefs and Health-Seeking Behaviour of the Bhil Women of Panchamal District, Gujarat State" (Chapter 3) in *Listening to Women Talk About Their Health Issues and Evidence from India* 1994, Ed. by Gittelsohn, et al, Har-Anand Publications

Prasad, J.H., George, V., Lalitha, M.K., Jayapaul, M.N.R., Abraham, S., Shetty, N., Joseph, A. "Prevalence of Reproductive Tract Infections Among Adolescents in a Rural Community in Tamil Nadu." Unpublished paper. 1999.

Ram, U. Interview. February 11, 2004.

Ramasubban, R. "Women's Vulnerability – The Recent Evidence on Sexually Transmitted Infections" (Chapter 7) in *Women's Reproductive Health in India* 2000, Ed. by Ramasubban and Jejeebhoy, Rawat Publications. Pp. 281-329.

Rao, M. "Reproductive health in India's primary health care system." *The National Medical Journal of India* 1997; 10 (3): 134-138.

Rishyasringa, B. "Social Policy and Reproductive Health" (Chapter 10) in *Women's Reproductive Health in India* 2000, Ed. by Ramasubban and Jejeebhoy, Rawat Publications. Pp. 418-442.

Sajan, F., Fikree, F.F. "Perceived Gynecological Morbidity among Young Ever-married Women Living in Squatter Settlements of Karachi, Pakistan." *Journal of Pakistani Medical Association* 1999; 49 (4): 92-97.

Schensul, S.L., Ram, U., Mekki-Berrada, A., Lewis, J. "Traditional and Other Medical Resources and Women's Health in Slum Communities in Mumbai, India." Application submitted to the Indo-U.S. Program on Maternal and Child Health and Human Development Research. July 15, 2003.

Sharma, S. "Baiganwadi." Compilation of key informant interviews (unpublished), 2004.

Sharma, S., Schensul, S., Chattopadhyay, S., Nastasi, B.K., Rao, R. "Assessing the Factors that Contribute to HIV/STD Transmission in Marriage in Urban Slum Communities in India." Unpublished manuscript, 2004.

Sherris, J et al. "Reproductive Health Problems Loom in LDC's." *Population Today* 1995; 23 (1):4. Adapted from "Women's Reproductive Health: The Role of Family Planning Programs" by Jacqueline Sherris et al, *Outlook* 12(2), 1994.

Singh, R.K. Interview. February 19, 2004.

Singh, S.K. 2002. "Drug use and HIV risk among male migrants to Mumbai." Paper presented at the XIV International AIDS Conference. July 7-12, 2002.

Wasserheit, J.N. "The significance and scope of reproductive tract infections among Third World women." *International Journal of Gynecology and Obstetrics* 1989: Suppl 3: 145-168.

Wasserheit, J.N., Harris, J.R., Chakraborty, J., Kay, B.A., Mason, K.J. "Reproductive Tract Infections in a Family Planning Population in Rural Bangladesh." *Studies in Family Planning* 1989; 20 (2): 69-80.

WHO. "An overview of selected curable sexually transmitted diseases." Unpublished paper, WHO Global Programme on AIDS, Geneva, Switzerland. 1995.

Younis, N., Khattab, H., Zurayk, H., El-Mouelhy, M., Amin, M.A., Farag, A.M. "A Community Study of Gynecological and Related Morbidities in Rural Egypt." *Studies in Family Planning* 1993; 24 (3): 175-186.